FIGURE 1

HCV NS3 HELICASE COORDINATES

		Atom Type	Resid	#	X	Y	Z	OCC	B
ATOM	1	N	PRO	190	-0.567	24.363	16.753	1.00	49.28
ATOM	2	CD	PRO	190	-0.755	25.375	17.807	1.00	48.44
ATOM	3	CA	PRO	190	-0.399	23.026	17.339	1.00	49.21
ATOM	4	CB	PRO	190	-0.793	23.252	18.793	1.00	48.67
ATOM	5	CG	PRO	190	-0.283	24.643	19.036	1.00	48.14
ATOM	6	C	PRO	190	-1.288	21.990	16.644	1.00	49.61
ATOM	7	O	PRO	190	-2.520	22.007	16.772	1.00	49.44
ATOM	8	N	PRO	191	-0.669	21.098	15.857	1.00	49.77
ATOM	9	CD	PRO	191	0.761	21.088	15.505	1.00	50.59
ATOM	10	CA	PRO	191	-1.389	20.053	15.125	1.00	49.68
ATOM	11	CB	PRO	191	-0.296	19.432	14.245	1.00	49.43
ATOM	12	CG	PRO	191	0.723	20.544	14.109	1.00	50.11
ATOM	13	C	PRO	191	-2.024	19.007	16.033	1.00	49.16
ATOM	14	O	PRO	191	-1.368	18.447	16.911	1.00	49.03
ATOM	15	N	ALA	192	-3.309	18.751	15.823	1.00	48.24
ATOM	16	CA	ALA	192	-4.000	17.745	16.616	1.00	47.12
ATOM	17	CB	ALA	192	-5.477	17.713	16.265	1.00	47.93
ATOM	18	C	ALA	192	-3.356	16.408	16.283	1.00	45.46
ATOM	19	O	ALA	192	-2.803	16.234	15.193	1.00	44.90
ATOM	20	N	VAL	193	-3.398	15.481	17.230	1.00	43.63
ATOM	21	CA	VAL	193	-2.823	14.164	17.009	1.00	42.13
ATOM	22	CB	VAL	193	-2.825	13.322	18.299	1.00	40.58
ATOM	23	CG1	VAL	193	-2.060	12.023	18.080	1.00	39.57
ATOM	24	CG2	VAL	193	-2.217	14.124	19.442	1.00	38.30
ATOM	25	C	VAL	193	-3.641	13.482	15.909	1.00	42.80
ATOM	26	O	VAL	193	-4.810	13.132	16.109	1.00	42.17
ATOM	27	N	PRO	194	-3.033	13.309	14.724	1.00	42.99
ATOM	28	CD	PRO	194	-1.601	13.536	14.488	1.00	43.90
ATOM	29	CA	PRO	194	-3.638	12.690	13.546	1.00	43.17
ATOM	30	CB	PRO	194	-2.493	12.691	12.536	1.00	43.02
ATOM	31	CG	PRO	194	-1.571	13.753	13.016	1.00	43.69
ATOM	32	C	PRO	194	-4.068	11.265	13.819	1.00	43.70
ATOM	33	O	PRO	194	-3.519	10.595	14.691	1.00	44.16
ATOM	34	N	ALA	195	-5.031	10.794	13.038	1.00	43.76
ATOM	35	CA	ALA	195	-5.522	9.433	13.176	1.00	43.44
ATOM	36	CB	ALA	195	-6.782	9.247	12.327	1.00	44.50
ATOM	37	C	ALA	195	-4.422	8.466	12.732	1.00	42.59
ATOM	38	O	ALA	195	-4.320	7.345	13.235	1.00	43.20
ATOM	39	N	SER	196	-3.607	8.914	11.783	1.00	41.07
ATOM	40	CA	SER	196	-2.507	8.117	11.255	1.00	40.13
ATOM	41	CB	SER	196	-2.859	7.604	9.851	1.00	41.51
ATOM	42	OG	SER	196	-3.572	8.583	9.106	1.00	43.93
ATOM	43	C	SER	196	-1.225	8.957	11.233	1.00	37.38
ATOM	44	O	SER	196	-1.274	10.181	11.393	1.00	36.47
ATOM	45	N	PHE	197	-0.082	8.303	11.037	1.00	35.00
ATOM	46	CA	PHE	197	1.193	9.017	11.014	1.00	31.57
ATOM	47	CB	PHE	197	2.373	8.079	10.744	1.00	28.81
ATOM	48	CG	PHE	197	3.697	8.794	10.693	1.00	25.08
ATOM	49	CD1	PHE	197	4.343	9.162	11.863	1.00	23.41
ATOM	50	CD2	PHE	197	4.254	9.167	9.482	1.00	23.23
ATOM	51	CE1	PHE	197	5.505	9.887	11.824	1.00	21.81
ATOM	52	CE2	PHE	197	5.420	9.894	9.437	1.00	21.64
ATOM	53	CZ	PHE	197	6.045	10.256	10.606	1.00	22.04

FIGURE 1 (cont.)

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ATOM     54  C   PHE   197       1.262  10.163  10.020  1.00 30.70
ATOM     55  O   PHE   197       1.089   9.965   8.816  1.00 31.02
ATOM     56  N   GLN   198       1.582  11.345  10.536  1.00 30.64
ATOM     57  CA  GLN   198       1.731  12.550   9.732  1.00 30.20
ATOM     58  CB  GLN   198       0.478  13.438   9.818  1.00 33.70
ATOM     59  CG  GLN   198      -0.893  12.720   9.747  1.00 38.79
ATOM     60  CD  GLN   198      -1.331  12.268   8.350  1.00 41.73
ATOM     61  OE1 GLN   198      -2.254  11.462   8.218  1.00 44.20
ATOM     62  NE2 GLN   198      -0.696  12.802   7.310  1.00 44.35
ATOM     63  C   GLN   198       2.921  13.340  10.279  1.00 28.49
ATOM     64  O   GLN   198       3.341  13.148  11.423  1.00 27.20
ATOM     65  N   VAL   199       3.485  14.191   9.431  1.00 28.09
ATOM     66  CA  VAL   199       4.595  15.074   9.786  1.00 27.30
ATOM     67  CB  VAL   199       5.798  14.949   8.803  1.00 27.93
ATOM     68  CG1 VAL   199       6.783  16.106   9.018  1.00 26.84
ATOM     69  CG2 VAL   199       6.510  13.607   8.984  1.00 27.42
ATOM     70  C   VAL   199       3.989  16.464   9.624  1.00 26.70
ATOM     71  O   VAL   199       3.425  16.784   8.579  1.00 26.24
ATOM     72  N   ALA   200       4.115  17.298  10.640  1.00 26.58
ATOM     73  CA  ALA   200       3.538  18.624  10.574  1.00 25.57
ATOM     74  CB  ALA   200       2.364  18.725  11.544  1.00 24.63
ATOM     75  C   ALA   200       4.567  19.677  10.906  1.00 25.17
ATOM     76  O   ALA   200       5.569  19.400  11.558  1.00 24.12
ATOM     77  N   HIS   201       4.306  20.891  10.442  1.00 25.38
ATOM     78  CA  HIS   201       5.178  22.022  10.698  1.00 25.85
ATOM     79  CB  HIS   201       5.417  22.812   9.413  1.00 24.66
ATOM     80  CG  HIS   201       6.130  22.041   8.353  1.00 24.83
ATOM     81  CD2 HIS   201       5.683  21.125   7.461  1.00 26.76
ATOM     82  ND1 HIS   201       7.480  22.171   8.124  1.00 24.29
ATOM     83  CE1 HIS   201       7.838  21.367   7.139  1.00 27.15
ATOM     84  NE2 HIS   201       6.767  20.722   6.719  1.00 28.31
ATOM     85  C   HIS   201       4.469  22.927  11.689  1.00 26.56
ATOM     86  O   HIS   201       3.264  23.163  11.556  1.00 27.65
ATOM     87  N   LEU   202       5.191  23.399  12.698  1.00 26.07
ATOM     88  CA  LEU   202       4.601  24.317  13.659  1.00 25.58
ATOM     89  CB  LEU   202       4.621  23.756  15.085  1.00 25.67
ATOM     90  CG  LEU   202       4.182  24.740  16.183  1.00 25.11
ATOM     91  CD1 LEU   202       2.710  25.088  16.033  1.00 22.05
ATOM     92  CD2 LEU   202       4.459  24.159  17.554  1.00 23.90
ATOM     93  C   LEU   202       5.398  25.609  13.585  1.00 25.03
ATOM     94  O   LEU   202       6.563  25.645  13.962  1.00 26.19
ATOM     95  N   HIS   203       4.796  26.637  13.000  1.00 24.59
ATOM     96  CA  HIS   203       5.449  27.923  12.874  1.00 26.20
ATOM     97  CB  HIS   203       5.295  28.476  11.451  1.00 25.91
ATOM     98  CG  HIS   203       5.862  27.588  10.384  1.00 24.03
ATOM     99  CD2 HIS   203       5.581  27.497   9.062  1.00 24.35
ATOM    100  ND1 HIS   203       6.827  26.637  10.633  1.00 25.58
ATOM    101  CE1 HIS   203       7.115  25.994   9.517  1.00 23.23
ATOM    102  NE2 HIS   203       6.372  26.498   8.548  1.00 24.13
ATOM    103  C   HIS   203       4.763  28.836  13.877  1.00 28.92
ATOM    104  O   HIS   203       3.590  29.174  13.711  1.00 29.53
ATOM    105  N   ALA   204       5.479  29.191  14.939  1.00 30.12
ATOM    106  CA  ALA   204       4.936  30.043  15.982  1.00 30.61
ATOM    107  CB  ALA   204       4.275  29.193  17.066  1.00 30.68
ATOM    108  C   ALA   204       6.093  30.831  16.556  1.00 31.44
ATOM    109  O   ALA   204       7.201  30.310  16.662  1.00 32.28
ATOM    110  N   PRO   205       5.847  32.092  16.957  1.00 32.18
ATOM    111  CD  PRO   205       4.523  32.742  16.982  1.00 32.11
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FIGURE 1 (cont.)

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ATOM    112  CA  PRO   205       6.872  32.978  17.524  1.00 31.56
ATOM    113  CB  PRO   205       6.102  34.282  17.748  1.00 31.92
ATOM    114  CG  PRO   205       4.708  33.804  18.033  1.00 31.71
ATOM    115  C   PRO   205       7.525  32.474  18.805  1.00 30.91
ATOM    116  O   PRO   205       6.924  31.728  19.566  1.00 30.86
ATOM    117  N   THR   206       8.764  32.888  19.037  1.00 31.28
ATOM    118  CA  THR   206       9.492  32.486  20.228  1.00 32.05
ATOM    119  CB  THR   206      10.872  33.160  20.276  1.00 32.26
ATOM    120  OG1 THR   206      11.616  32.779  19.115  1.00 35.41
ATOM    121  CG2 THR   206      11.641  32.740  21.506  1.00 32.09
ATOM    122  C   THR   206       8.674  32.894  21.444  1.00 32.25
ATOM    123  O   THR   206       8.038  33.942  21.439  1.00 34.50
ATOM    124  N   GLY   207       8.664  32.052  22.470  1.00 31.86
ATOM    125  CA  GLY   207       7.894  32.358  23.661  1.00 31.13
ATOM    126  C   GLY   207       6.455  31.860  23.626  1.00 30.15
ATOM    127  O   GLY   207       5.765  31.891  24.642  1.00 31.27
ATOM    128  N   SER   208       6.005  31.362  22.480  1.00 29.48
ATOM    129  CA  SER   208       4.642  30.868  22.374  1.00 28.52
ATOM    130  CB  SER   208       4.182  30.872  20.908  1.00 27.20
ATOM    131  OG  SER   208       5.029  30.097  20.086  1.00 25.55
ATOM    132  C   SER   208       4.415  29.497  23.033  1.00 28.55
ATOM    133  O   SER   208       3.271  29.044  23.149  1.00 29.28
ATOM    134  N   GLY   209       5.494  28.840  23.463  1.00 28.23
ATOM    135  CA  GLY   209       5.367  27.540  24.120  1.00 28.17
ATOM    136  C   GLY   209       5.508  26.273  23.279  1.00 29.13
ATOM    137  O   GLY   209       5.108  25.181  23.721  1.00 27.88
ATOM    138  N   LYS   210       6.110  26.398  22.096  1.00 29.07
ATOM    139  CA  LYS   210       6.318  25.267  21.180  1.00 28.86
ATOM    140  CB  LYS   210       7.066  25.726  19.920  1.00 29.78
ATOM    141  CG  LYS   210       6.367  26.802  19.103  1.00 30.86
ATOM    142  CD  LYS   210       7.072  27.040  17.770  1.00 30.40
ATOM    143  CE  LYS   210       8.506  27.502  17.959  1.00 31.43
ATOM    144  NZ  LYS   210       8.607  28.803  18.689  1.00 33.79
ATOM    145  C   LYS   210       7.092  24.098  21.797  1.00 28.32
ATOM    146  O   LYS   210       6.829  22.935  21.498  1.00 28.11
ATOM    147  N   SER   211       8.072  24.411  22.630  1.00 28.62
ATOM    148  CA  SER   211       8.876  23.377  23.256  1.00 28.88
ATOM    149  CB  SER   211      10.348  23.763  23.172  1.00 30.34
ATOM    150  OG  SER   211      10.516  25.162  23.338  1.00 32.24
ATOM    151  C   SER   211       8.509  23.084  24.700  1.00 28.90
ATOM    152  O   SER   211       9.241  22.376  25.384  1.00 29.14
ATOM    153  N   THR   212       7.367  23.599  25.152  1.00 29.90
ATOM    154  CA  THR   212       6.925  23.399  26.532  1.00 29.80
ATOM    155  CB  THR   212       7.371  24.579  27.415  1.00 28.95
ATOM    156  OG1 THR   212       7.033  25.814  26.768  1.00 29.28
ATOM    157  CG2 THR   212       8.870  24.531  27.651  1.00 26.88
ATOM    158  C   THR   212       5.412  23.193  26.686  1.00 29.89
ATOM    159  O   THR   212       4.949  22.153  27.166  1.00 29.41
ATOM    160  N   LYS   213       4.641  24.191  26.277  1.00 31.79
ATOM    161  CA  LYS   213       3.185  24.128  26.374  1.00 31.17
ATOM    162  CB  LYS   213       2.576  25.486  26.013  1.00 31.92
ATOM    163  CG  LYS   213       1.066  25.565  26.123  1.00 33.79
ATOM    164  CD  LYS   213       0.627  27.019  26.126  1.00 36.61
ATOM    165  CE  LYS   213      -0.887  27.169  26.155  1.00 38.22
ATOM    166  NZ  LYS   213      -1.254  28.563  26.558  1.00 38.71
ATOM    167  C   LYS   213       2.636  23.043  25.464  1.00 30.15
ATOM    168  O   LYS   213       1.836  22.212  25.894  1.00 29.46
ATOM    169  N   VAL   214       3.110  23.026  24.222  1.00 29.37
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FIGURE 1 (cont.)

ATOM	170	CA	VAL	214	2.657	22.042	23.247	1.00	29.35
ATOM	171	CB	VAL	214	3.274	22.317	21.845	1.00	30.43
ATOM	172	CG1	VAL	214	2.805	21.296	20.826	1.00	29.20
ATOM	173	CG2	VAL	214	2.881	23.719	21.381	1.00	31.27
ATOM	174	C	VAL	214	2.903	20.604	23.725	1.00	27.79
ATOM	175	O	VAL	214	1.980	19.781	23.722	1.00	29.24
ATOM	176	N	PRO	215	4.146	20.268	24.125	1.00	25.78
ATOM	177	CD	PRO	215	5.439	20.966	24.012	1.00	24.07
ATOM	178	CA	PRO	215	4.338	18.887	24.586	1.00	24.86
ATOM	179	CB	PRO	215	5.862	18.782	24.767	1.00	22.92
ATOM	180	CG	PRO	215	6.298	20.185	24.983	1.00	23.18
ATOM	181	C	PRO	215	3.556	18.590	25.878	1.00	23.85
ATOM	182	O	PRO	215	3.157	17.448	26.109	1.00	24.03
ATOM	183	N	ALA	216	3.322	19.615	26.700	1.00	24.13
ATOM	184	CA	ALA	216	2.555	19.466	27.946	1.00	24.64
ATOM	185	CB	ALA	216	2.592	20.754	28.741	1.00	23.09
ATOM	186	C	ALA	216	1.100	19.089	27.616	1.00	25.20
ATOM	187	O	ALA	216	0.517	18.192	28.232	1.00	25.36
ATOM	188	N	ALA	217	0.524	19.773	26.631	1.00	25.49
ATOM	189	CA	ALA	217	-0.836	19.501	26.187	1.00	25.40
ATOM	190	CB	ALA	217	-1.277	20.565	25.194	1.00	23.76
ATOM	191	C	ALA	217	-0.905	18.104	25.547	1.00	25.48
ATOM	192	O	ALA	217	-1.878	17.373	25.725	1.00	25.77
ATOM	193	N	TYR	218	0.136	17.735	24.807	1.00	25.42
ATOM	194	CA	TYR	218	0.191	16.422	24.165	1.00	24.86
ATOM	195	CB	TYR	218	1.410	16.306	23.243	1.00	24.75
ATOM	196	CG	TYR	218	1.253	16.946	21.882	1.00	24.58
ATOM	197	CD1	TYR	218	0.072	16.795	21.146	1.00	23.47
ATOM	198	CE1	TYR	218	-0.048	17.332	19.858	1.00	24.75
ATOM	199	CD2	TYR	218	2.310	17.656	21.303	1.00	23.47
ATOM	200	CE2	TYR	218	2.205	18.192	20.021	1.00	23.76
ATOM	201	CZ	TYR	218	1.025	18.028	19.299	1.00	25.01
ATOM	202	OH	TYR	218	0.924	18.553	18.023	1.00	24.22
ATOM	203	C	TYR	218	0.245	15.294	25.183	1.00	23.95
ATOM	204	O	TYR	218	-0.499	14.324	25.065	1.00	25.49
ATOM	205	N	ALA	219	1.140	15.410	26.160	1.00	23.90
ATOM	206	CA	ALA	219	1.305	14.388	27.204	1.00	25.10
ATOM	207	CB	ALA	219	2.553	14.673	28.033	1.00	23.15
ATOM	208	C	ALA	219	0.079	14.281	28.115	1.00	26.52
ATOM	209	O	ALA	219	-0.257	13.193	28.595	1.00	26.05
ATOM	210	N	ALA	220	-0.591	15.416	28.328	1.00	28.32
ATOM	211	CA	ALA	220	-1.789	15.484	29.161	1.00	27.69
ATOM	212	CB	ALA	220	-2.224	16.933	29.346	1.00	28.77
ATOM	213	C	ALA	220	-2.904	14.666	28.528	1.00	27.42
ATOM	214	O	ALA	220	-3.873	14.315	29.190	1.00	27.84
ATOM	215	N	GLN	221	-2.762	14.380	27.236	1.00	28.01
ATOM	216	CA	GLN	221	-3.733	13.576	26.492	1.00	27.15
ATOM	217	CB	GLN	221	-3.782	13.991	25.027	1.00	28.76
ATOM	218	CG	GLN	221	-4.413	15.331	24.739	1.00	30.06
ATOM	219	CD	GLN	221	-4.084	15.798	23.335	1.00	32.54
ATOM	220	OE1	GLN	221	-4.457	15.159	22.346	1.00	34.37
ATOM	221	NE2	GLN	221	-3.350	16.895	23.238	1.00	34.38
ATOM	222	C	GLN	221	-3.321	12.119	26.554	1.00	26.58
ATOM	223	O	GLN	221	-3.881	11.284	25.851	1.00	27.44
ATOM	224	N	GLY	222	-2.285	11.833	27.334	1.00	25.93
ATOM	225	CA	GLY	222	-1.828	10.472	27.487	1.00	24.98
ATOM	226	C	GLY	222	-0.767	9.987	26.530	1.00	26.33
ATOM	227	O	GLY	222	-0.561	8.783	26.414	1.00	27.70

FIGURE 1 (cont.)

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ATOM    228  N   TYR  223      -0.057  10.896  25.875  1.00 26.89
ATOM    229  CA  TYR  223       0.995  10.498  24.940  1.00 25.87
ATOM    230  CB  TYR  223       0.901  11.316  23.665  1.00 25.29
ATOM    231  CG  TYR  223      -0.373  11.111  22.906  1.00 25.96
ATOM    232  CD1 TYR  223      -1.399  12.045  22.974  1.00 25.65
ATOM    233  CE1 TYR  223      -2.559  11.873  22.250  1.00 27.75
ATOM    234  CD2 TYR  223      -0.542   9.993  22.096  1.00 26.27
ATOM    235  CE2 TYR  223      -1.692   9.808  21.372  1.00 27.03
ATOM    236  CZ  TYR  223      -2.698  10.749  21.446  1.00 28.75
ATOM    237  OH  TYR  223      -3.839  10.573  20.695  1.00 32.89
ATOM    238  C   TYR  223       2.415  10.629  25.483  1.00 26.22
ATOM    239  O   TYR  223       2.697  11.441  26.373  1.00 25.06
ATOM    240  N   LYS  224       3.308   9.826  24.919  1.00 27.21
ATOM    241  CA  LYS  224       4.721   9.850  25.270  1.00 27.71
ATOM    242  CB  LYS  224       5.325   8.460  25.107  1.00 29.76
ATOM    243  CG  LYS  224       4.827   7.470  26.139  1.00 35.42
ATOM    244  CD  LYS  224       5.314   7.887  27.525  1.00 39.88
ATOM    245  CE  LYS  224       4.771   7.005  28.652  1.00 41.50
ATOM    246  NZ  LYS  224       5.385   7.396  29.969  1.00 42.40
ATOM    247  C   LYS  224       5.309  10.821  24.258  1.00 26.68
ATOM    248  O   LYS  224       5.265  10.571  23.047  1.00 27.78
ATOM    249  N   VAL  225       5.785  11.959  24.746  1.00 25.81
ATOM    250  CA  VAL  225       6.333  12.998  23.883  1.00 24.37
ATOM    251  CB  VAL  225       5.649  14.354  24.161  1.00 24.83
ATOM    252  CG1 VAL  225       5.997  15.359  23.075  1.00 23.06
ATOM    253  CG2 VAL  225       4.137  14.166  24.274  1.00 25.36
ATOM    254  C   VAL  225       7.834  13.190  24.046  1.00 23.03
ATOM    255  O   VAL  225       8.355  13.220  25.166  1.00 20.40
ATOM    256  N   LEU  226       8.513  13.330  22.914  1.00 22.55
ATOM    257  CA  LEU  226       9.954  13.551  22.878  1.00 21.32
ATOM    258  CB  LEU  226      10.627  12.471  22.037  1.00 18.45
ATOM    259  CG  LEU  226      12.082  12.710  21.656  1.00 18.51
ATOM    260  CD1 LEU  226      12.985  12.577  22.884  1.00 16.54
ATOM    261  CD2 LEU  226      12.473  11.717  20.570  1.00 19.37
ATOM    262  C   LEU  226      10.192  14.926  22.253  1.00 20.71
ATOM    263  O   LEU  226       9.629  15.245  21.202  1.00 20.63
ATOM    264  N   VAL  227      10.993  15.752  22.912  1.00 22.06
ATOM    265  CA  VAL  227      11.290  17.087  22.404  1.00 22.02
ATOM    266  CB  VAL  227      10.915  18.173  23.425  1.00 20.33
ATOM    267  CG1 VAL  227      10.933  19.532  22.757  1.00 19.96
ATOM    268  CG2 VAL  227       9.561  17.881  24.043  1.00 19.10
ATOM    269  C   VAL  227      12.787  17.165  22.111  1.00 22.26
ATOM    270  O   VAL  227      13.612  17.040  23.023  1.00 23.12
ATOM    271  N   LEU  228      13.135  17.322  20.839  1.00 21.87
ATOM    272  CA  LEU  228      14.534  17.397  20.435  1.00 21.87
ATOM    273  CB  LEU  228      14.770  16.590  19.162  1.00 20.02
ATOM    274  CG  LEU  228      14.576  15.079  19.254  1.00 18.46
ATOM    275  CD1 LEU  228      14.817  14.488  17.874  1.00 17.50
ATOM    276  CD2 LEU  228      15.522  14.477  20.304  1.00 15.84
ATOM    277  C   LEU  228      14.961  18.833  20.216  1.00 22.19
ATOM    278  O   LEU  228      14.338  19.566  19.450  1.00 23.01
ATOM    279  N   ASN  229      16.063  19.211  20.849  1.00 22.54
ATOM    280  CA  ASN  229      16.587  20.567  20.756  1.00 22.64
ATOM    281  CB  ASN  229      16.276  21.301  22.067  1.00 23.81
ATOM    282  CG  ASN  229      16.582  22.770  22.008  1.00 24.90
ATOM    283  OD1 ASN  229      17.732  23.196  22.184  1.00 26.02
ATOM    284  ND2 ASN  229      15.548  23.568  21.794  1.00 24.10
ATOM    285  C   ASN  229      18.101  20.482  20.517  1.00 22.10
```

FIGURE 1 (cont.)

ATOM	286	O	ASN	229	18.756	19.525	20.938	1.00	19.92
ATOM	287	N	PRO	230	18.659	21.429	19.753	1.00	23.12
ATOM	288	CD	PRO	230	17.987	22.400	18.872	1.00	21.71
ATOM	289	CA	PRO	230	20.107	21.397	19.495	1.00	23.95
ATOM	290	CB	PRO	230	20.269	22.383	18.336	1.00	23.83
ATOM	291	CG	PRO	230	19.114	23.319	18.510	1.00	23.76
ATOM	292	C	PRO	230	21.011	21.755	20.688	1.00	24.47
ATOM	293	O	PRO	230	22.114	21.211	20.834	1.00	25.45
ATOM	294	N	SER	231	20.512	22.595	21.584	1.00	24.28
ATOM	295	CA	SER	231	21.290	23.036	22.727	1.00	24.31
ATOM	296	CB	SER	231	20.886	24.461	23.088	1.00	23.88
ATOM	297	OG	SER	231	21.566	24.896	24.251	1.00	27.81
ATOM	298	C	SER	231	21.236	22.165	23.975	1.00	25.03
ATOM	299	O	SER	231	20.157	21.870	24.496	1.00	25.25
ATOM	300	N	VAL	232	22.413	21.805	24.480	1.00	24.64
ATOM	301	CA	VAL	232	22.525	21.011	25.694	1.00	24.77
ATOM	302	CB	VAL	232	24.006	20.628	25.975	1.00	24.98
ATOM	303	CG1	VAL	232	24.184	20.163	27.417	1.00	24.08
ATOM	304	CG2	VAL	232	24.458	19.534	25.019	1.00	20.75
ATOM	305	C	VAL	232	21.976	21.862	26.852	1.00	26.64
ATOM	306	O	VAL	232	21.174	21.394	27.668	1.00	28.40
ATOM	307	N	ALA	233	22.365	23.133	26.879	1.00	26.57
ATOM	308	CA	ALA	233	21.916	24.051	27.922	1.00	26.13
ATOM	309	CB	ALA	233	22.592	25.417	27.759	1.00	25.46
ATOM	310	C	ALA	233	20.401	24.203	27.907	1.00	25.51
ATOM	311	O	ALA	233	19.764	24.124	28.952	1.00	26.22
ATOM	312	N	ALA	234	19.831	24.397	26.718	1.00	25.47
ATOM	313	CA	ALA	234	18.385	24.553	26.567	1.00	24.61
ATOM	314	CB	ALA	234	18.031	24.857	25.138	1.00	23.89
ATOM	315	C	ALA	234	17.653	23.304	27.015	1.00	25.81
ATOM	316	O	ALA	234	16.652	23.393	27.728	1.00	25.42
ATOM	317	N	THR	235	18.157	22.144	26.591	1.00	26.43
ATOM	318	CA	THR	235	17.556	20.868	26.951	1.00	26.97
ATOM	319	CB	THR	235	18.339	19.673	26.345	1.00	27.79
ATOM	320	OG1	THR	235	18.322	19.768	24.916	1.00	27.58
ATOM	321	CG2	THR	235	17.704	18.343	26.748	1.00	26.60
ATOM	322	C	THR	235	17.499	20.746	28.472	1.00	27.43
ATOM	323	O	THR	235	16.440	20.488	29.035	1.00	28.23
ATOM	324	N	LEU	236	18.624	20.984	29.138	1.00	27.19
ATOM	325	CA	LEU	236	18.670	20.898	30.595	1.00	27.35
ATOM	326	CB	LEU	236	20.086	21.185	31.096	1.00	28.04
ATOM	327	CG	LEU	236	21.174	20.151	30.842	1.00	27.41
ATOM	328	CD1	LEU	236	22.519	20.838	30.894	1.00	28.18
ATOM	329	CD2	LEU	236	21.086	19.028	31.858	1.00	26.49
ATOM	330	C	LEU	236	17.715	21.898	31.235	1.00	26.83
ATOM	331	O	LEU	236	17.054	21.601	32.232	1.00	27.18
ATOM	332	N	GLY	237	17.651	23.086	30.648	1.00	26.16
ATOM	333	CA	GLY	237	16.804	24.131	31.178	1.00	26.03
ATOM	334	C	GLY	237	15.333	23.812	31.228	1.00	25.39
ATOM	335	O	GLY	237	14.651	24.230	32.151	1.00	25.99
ATOM	336	N	PHE	238	14.841	23.065	30.252	1.00	25.78
ATOM	337	CA	PHE	238	13.428	22.721	30.205	1.00	27.27
ATOM	338	CB	PHE	238	13.138	21.811	29.013	1.00	27.38
ATOM	339	CG	PHE	238	13.274	22.495	27.691	1.00	29.37
ATOM	340	CD1	PHE	238	12.493	23.610	27.388	1.00	29.67
ATOM	341	CD2	PHE	238	14.202	22.052	26.756	1.00	29.17
ATOM	342	CE1	PHE	238	12.641	24.273	26.169	1.00	29.22
ATOM	343	CE2	PHE	238	14.354	22.707	25.541	1.00	28.63

FIGURE 1 (cont.)

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ATOM    344  CZ  PHE   238      13.571  23.822  25.248  1.00 27.73
ATOM    345  C   PHE   238      12.908  22.087  31.488  1.00 28.44
ATOM    346  O   PHE   238      11.740  22.267  31.838  1.00 28.75
ATOM    347  N   GLY   239      13.782  21.377  32.199  1.00 29.43
ATOM    348  CA  GLY   239      13.387  20.728  33.439  1.00 30.17
ATOM    349  C   GLY   239      12.724  21.653  34.447  1.00 30.46
ATOM    350  O   GLY   239      11.590  21.420  34.874  1.00 30.46
ATOM    351  N   ALA   240      13.429  22.711  34.825  1.00 30.54
ATOM    352  CA  ALA   240      12.904  23.667  35.785  1.00 31.68
ATOM    353  CB  ALA   240      14.007  24.611  36.258  1.00 30.45
ATOM    354  C   ALA   240      11.732  24.460  35.216  1.00 31.56
ATOM    355  O   ALA   240      10.736  24.673  35.904  1.00 32.32
ATOM    356  N   TYR   241      11.836  24.873  33.957  1.00 31.75
ATOM    357  CA  TYR   241      10.770  25.653  33.340  1.00 30.92
ATOM    358  CB  TYR   241      11.139  26.095  31.920  1.00 31.44
ATOM    359  CG  TYR   241      10.037  26.903  31.250  1.00 33.57
ATOM    360  CD1 TYR   241      10.086  28.294  31.220  1.00 35.11
ATOM    361  CE1 TYR   241       9.052  29.038  30.657  1.00 36.03
ATOM    362  CD2 TYR   241       8.919  26.276  30.690  1.00 33.41
ATOM    363  CE2 TYR   241       7.889  27.006  30.133  1.00 34.12
ATOM    364  CZ  TYR   241       7.958  28.384  30.122  1.00 36.46
ATOM    365  OH  TYR   241       6.915  29.107  29.601  1.00 39.06
ATOM    366  C   TYR   241       9.464  24.885  33.288  1.00 29.43
ATOM    367  O   TYR   241       8.402  25.452  33.500  1.00 28.88
ATOM    368  N   MET   242       9.547  23.613  32.932  1.00 28.93
ATOM    369  CA  MET   242       8.368  22.767  32.824  1.00 29.09
ATOM    370  CB  MET   242       8.735  21.464  32.106  1.00 28.71
ATOM    371  CG  MET   242       8.956  21.646  30.602  1.00 27.19
ATOM    372  SD  MET   242       7.445  22.198  29.767  1.00 24.74
ATOM    373  CE  MET   242       6.543  20.617  29.574  1.00 25.21
ATOM    374  C   MET   242       7.732  22.501  34.191  1.00 28.87
ATOM    375  O   MET   242       6.507  22.451  34.339  1.00 25.61
ATOM    376  N   SER   243       8.581  22.366  35.195  1.00 31.13
ATOM    377  CA  SER   243       8.125  22.137  36.543  1.00 31.64
ATOM    378  CB  SER   243       9.325  21.864  37.445  1.00 32.82
ATOM    379  OG  SER   243       8.916  21.422  38.725  1.00 37.37
ATOM    380  C   SER   243       7.378  23.390  36.994  1.00 31.87
ATOM    381  O   SER   243       6.226  23.320  37.420  1.00 32.45
ATOM    382  N   ALA   244       8.000  24.547  36.806  1.00 31.20
ATOM    383  CA  ALA   244       7.387  25.806  37.218  1.00 30.80
ATOM    384  CB  ALA   244       8.414  26.947  37.163  1.00 30.58
ATOM    385  C   ALA   244       6.148  26.182  36.420  1.00 29.56
ATOM    386  O   ALA   244       5.144  26.608  36.985  1.00 30.91
ATOM    387  N   ALA   245       6.205  25.994  35.113  1.00 27.79
ATOM    388  CA  ALA   245       5.093  26.369  34.261  1.00 27.16
ATOM    389  CB  ALA   245       5.601  26.694  32.871  1.00 26.05
ATOM    390  C   ALA   245       3.966  25.363  34.171  1.00 27.41
ATOM    391  O   ALA   245       2.804  25.742  34.001  1.00 27.65
ATOM    392  N   HIS   246       4.295  24.083  34.278  1.00 27.72
ATOM    393  CA  HIS   246       3.280  23.050  34.134  1.00 26.52
ATOM    394  CB  HIS   246       3.437  22.414  32.751  1.00 26.99
ATOM    395  CG  HIS   246       3.348  23.395  31.626  1.00 24.43
ATOM    396  CD2 HIS   246       4.309  23.992  30.882  1.00 26.07
ATOM    397  ND1 HIS   246       2.147  23.885  31.161  1.00 26.33
ATOM    398  CE1 HIS   246       2.369  24.741  30.179  1.00 25.34
ATOM    399  NE2 HIS   246       3.673  24.825  29.991  1.00 26.40
ATOM    400  C   HIS   246       3.245  21.961  35.208  1.00 26.80
ATOM    401  O   HIS   246       2.446  21.035  35.119  1.00 25.51
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FIGURE 1 (cont.)

ATOM	402	N	GLY	247	4.097	22.073	36.223	1.00	26.76
ATOM	403	CA	GLY	247	4.123	21.069	37.267	1.00	26.09
ATOM	404	C	GLY	247	4.509	19.740	36.657	1.00	27.58
ATOM	405	O	GLY	247	3.899	18.701	36.945	1.00	28.05
ATOM	406	N	VAL	248	5.497	19.782	35.768	1.00	27.72
ATOM	407	CA	VAL	248	5.985	18.589	35.088	1.00	27.72
ATOM	408	CB	VAL	248	5.712	18.668	33.558	1.00	28.05
ATOM	409	CG1	VAL	248	6.274	17.450	32.854	1.00	28.78
ATOM	410	CG2	VAL	248	4.220	18.792	33.278	1.00	27.03
ATOM	411	C	VAL	248	7.488	18.441	35.307	1.00	27.70
ATOM	412	O	VAL	248	8.229	19.414	35.224	1.00	27.56
ATOM	413	N	ASP	249	7.923	17.228	35.622	1.00	29.51
ATOM	414	CA	ASP	249	9.342	16.928	35.813	1.00	31.97
ATOM	415	CB	ASP	249	9.563	16.290	37.187	1.00	36.65
ATOM	416	CG	ASP	249	8.834	17.029	38.296	1.00	42.98
ATOM	417	OD1	ASP	249	9.183	18.198	38.578	1.00	48.26
ATOM	418	OD2	ASP	249	7.897	16.448	38.884	1.00	47.15
ATOM	419	C	ASP	249	9.655	15.927	34.697	1.00	30.40
ATOM	420	O	ASP	249	9.444	14.721	34.854	1.00	32.54
ATOM	421	N	PRO	250	10.112	16.412	33.531	1.00	28.60
ATOM	422	CD	PRO	250	10.397	17.809	33.145	1.00	28.10
ATOM	423	CA	PRO	250	10.411	15.500	32.424	1.00	27.32
ATOM	424	CB	PRO	250	10.356	16.432	31.218	1.00	25.82
ATOM	425	CG	PRO	250	10.998	17.658	31.748	1.00	25.77
ATOM	426	C	PRO	250	11.756	14.787	32.504	1.00	27.35
ATOM	427	O	PRO	250	12.581	15.083	33.368	1.00	27.56
ATOM	428	N	ASN	251	11.944	13.805	31.629	1.00	27.78
ATOM	429	CA	ASN	251	13.213	13.090	31.553	1.00	27.99
ATOM	430	CB	ASN	251	13.046	11.776	30.802	1.00	27.88
ATOM	431	CG	ASN	251	11.944	10.914	31.380	1.00	29.52
ATOM	432	OD1	ASN	251	12.136	10.211	32.377	1.00	29.08
ATOM	433	ND2	ASN	251	10.770	10.978	30.768	1.00	30.24
ATOM	434	C	ASN	251	14.131	14.026	30.763	1.00	28.29
ATOM	435	O	ASN	251	13.687	14.685	29.808	1.00	27.76
ATOM	436	N	ILE	252	15.387	14.131	31.185	1.00	28.26
ATOM	437	CA	ILE	252	16.349	15.004	30.517	1.00	27.72
ATOM	438	CB	ILE	252	16.891	16.081	31.491	1.00	25.56
ATOM	439	CG2	ILE	252	17.909	16.978	30.780	1.00	24.45
ATOM	440	CG1	ILE	252	15.731	16.880	32.116	1.00	23.07
ATOM	441	CD1	ILE	252	14.946	17.753	31.147	1.00	20.19
ATOM	442	C	ILE	252	17.511	14.157	29.995	1.00	29.20
ATOM	443	O	ILE	252	18.148	13.435	30.759	1.00	29.28
ATOM	444	N	ARG	253	17.776	14.230	28.695	1.00	29.57
ATOM	445	CA	ARG	253	18.862	13.455	28.109	1.00	29.87
ATOM	446	CB	ARG	253	18.306	12.366	27.207	1.00	30.75
ATOM	447	CG	ARG	253	17.023	11.733	27.695	1.00	32.49
ATOM	448	CD	ARG	253	16.943	10.331	27.175	1.00	35.54
ATOM	449	NE	ARG	253	18.046	9.553	27.726	1.00	40.71
ATOM	450	CZ	ARG	253	18.431	8.369	27.272	1.00	41.75
ATOM	451	NH1	ARG	253	19.449	7.743	27.846	1.00	42.45
ATOM	452	NH2	ARG	253	17.814	7.822	26.233	1.00	44.21
ATOM	453	C	ARG	253	19.858	14.296	27.309	1.00	31.31
ATOM	454	O	ARG	253	19.547	14.791	26.218	1.00	30.51
ATOM	455	N	THR	254	21.046	14.484	27.876	1.00	32.71
ATOM	456	CA	THR	254	22.114	15.225	27.214	1.00	33.25
ATOM	457	CB	THR	254	22.386	16.599	27.876	1.00	31.25
ATOM	458	OG1	THR	254	22.880	16.414	29.206	1.00	29.55
ATOM	459	CG2	THR	254	21.118	17.427	27.921	1.00	30.34

FIGURE 1 (cont.)

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ATOM    460  C   THR  254      23.374  14.370  27.289  1.00 35.29
ATOM    461  O   THR  254      23.378  13.313  27.926  1.00 34.39
ATOM    462  N   GLY  255      24.435  14.818  26.625  1.00 37.19
ATOM    463  CA  GLY  255      25.680  14.075  26.656  1.00 38.93
ATOM    464  C   GLY  255      26.217  14.023  28.072  1.00 40.31
ATOM    465  O   GLY  255      26.605  12.963  28.566  1.00 40.42
ATOM    466  N   VAL  256      26.192  15.169  28.744  1.00 41.59
ATOM    467  CA  VAL  256      26.684  15.252  30.111  1.00 43.59
ATOM    468  CB  VAL  256      26.869  16.712  30.597  1.00 43.46
ATOM    469  CG1 VAL  256      28.182  17.268  30.084  1.00 46.24
ATOM    470  CG2 VAL  256      25.705  17.591  30.153  1.00 43.43
ATOM    471  C   VAL  256      25.839  14.516  31.137  1.00 44.62
ATOM    472  O   VAL  256      26.356  13.667  31.860  1.00 45.65
ATOM    473  N   ARG  257      24.540  14.810  31.172  1.00 45.28
ATOM    474  CA  ARG  257      23.651  14.203  32.156  1.00 44.14
ATOM    475  CB  ARG  257      23.445  15.197  33.311  1.00 45.53
ATOM    476  CG  ARG  257      22.434  14.762  34.357  1.00 49.87
ATOM    477  CD  ARG  257      22.485  15.627  35.618  1.00 52.65
ATOM    478  NE  ARG  257      21.615  15.118  36.686  1.00 56.84
ATOM    479  CZ  ARG  257      21.608  13.858  37.140  1.00 58.71
ATOM    480  NH1 ARG  257      22.424  12.935  36.632  1.00 58.53
ATOM    481  NH2 ARG  257      20.778  13.513  38.119  1.00 59.13
ATOM    482  C   ARG  257      22.291  13.718  31.654  1.00 42.81
ATOM    483  O   ARG  257      21.629  14.385  30.856  1.00 42.13
ATOM    484  N   THR  258      21.896  12.544  32.136  1.00 42.22
ATOM    485  CA  THR  258      20.601  11.949  31.834  1.00 41.75
ATOM    486  CB  THR  258      20.730  10.521  31.268  1.00 41.55
ATOM    487  OG1 THR  258      21.112  10.588  29.890  1.00 43.65
ATOM    488  CG2 THR  258      19.411   9.770  31.376  1.00 41.26
ATOM    489  C   THR  258      19.864  11.902  33.173  1.00 41.88
ATOM    490  O   THR  258      20.431  11.489  34.191  1.00 43.37
ATOM    491  N   ILE  259      18.635  12.398  33.184  1.00 40.14
ATOM    492  CA  ILE  259      17.815  12.424  34.382  1.00 38.42
ATOM    493  CB  ILE  259      17.506  13.870  34.799  1.00 37.89
ATOM    494  CG2 ILE  259      16.631  13.891  36.043  1.00 38.14
ATOM    495  CG1 ILE  259      18.805  14.649  35.011  1.00 37.37
ATOM    496  CD1 ILE  259      18.593  16.115  35.332  1.00 37.01
ATOM    497  C   ILE  259      16.516  11.736  33.998  1.00 38.66
ATOM    498  O   ILE  259      15.754  12.258  33.185  1.00 38.35
ATOM    499  N   THR  260      16.307  10.532  34.510  1.00 39.27
ATOM    500  CA  THR  260      15.090   9.790  34.208  1.00 40.28
ATOM    501  CB  THR  260      15.384   8.297  33.979  1.00 41.32
ATOM    502  OG1 THR  260      16.401   8.165  32.977  1.00 42.58
ATOM    503  CG2 THR  260      14.125   7.573  33.504  1.00 42.71
ATOM    504  C   THR  260      14.075   9.989  35.333  1.00 39.99
ATOM    505  O   THR  260      14.356   9.733  36.504  1.00 39.99
ATOM    506  N   THR  261      12.894  10.452  34.958  1.00 39.53
ATOM    507  CA  THR  261      11.842  10.740  35.910  1.00 39.43
ATOM    508  CB  THR  261      11.392  12.185  35.717  1.00 40.25
ATOM    509  OG1 THR  261      12.527  13.049  35.864  1.00 42.32
ATOM    510  CG2 THR  261      10.337  12.562  36.723  1.00 42.64
ATOM    511  C   THR  261      10.628   9.829  35.793  1.00 38.62
ATOM    512  O   THR  261       9.843   9.700  36.736  1.00 39.27
ATOM    513  N   GLY  262      10.476   9.177  34.648  1.00 36.63
ATOM    514  CA  GLY  262       9.316   8.323  34.462  1.00 34.27
ATOM    515  C   GLY  262       8.185   9.149  33.875  1.00 32.70
ATOM    516  O   GLY  262       7.037   8.708  33.802  1.00 32.40
ATOM    517  N   SER  263       8.525  10.368  33.464  1.00 30.97
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FIGURE 1 (cont.)

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ATOM    518  CA  SER   263       7.571  11.282  32.861  1.00 28.52
ATOM    519  CB  SER   263       8.148  12.705  32.871  1.00 27.84
ATOM    520  OG  SER   263       7.276  13.641  32.251  1.00 26.21
ATOM    521  C   SER   263       7.286  10.852  31.420  1.00 27.13
ATOM    522  O   SER   263       8.092  10.151  30.796  1.00 25.11
ATOM    523  N   PRO   264       6.091  11.189  30.907  1.00 25.91
ATOM    524  CD  PRO   264       4.919  11.756  31.593  1.00 24.44
ATOM    525  CA  PRO   264       5.757  10.825  29.528  1.00 25.37
ATOM    526  CB  PRO   264       4.252  11.072  29.466  1.00 24.70
ATOM    527  CG  PRO   264       4.059  12.176  30.433  1.00 25.43
ATOM    528  C   PRO   264       6.516  11.761  28.575  1.00 25.19
ATOM    529  O   PRO   264       6.637  11.488  27.378  1.00 24.68
ATOM    530  N   ILE   265       7.009  12.874  29.113  1.00 25.11
ATOM    531  CA  ILE   265       7.760  13.839  28.323  1.00 24.64
ATOM    532  CB  ILE   265       7.395  15.284  28.689  1.00 24.85
ATOM    533  CG2 ILE   265       8.045  16.250  27.706  1.00 24.63
ATOM    534  CG1 ILE   265       5.880  15.463  28.623  1.00 25.72
ATOM    535  CD1 ILE   265       5.398  16.810  29.116  1.00 27.30
ATOM    536  C   ILE   265       9.257  13.646  28.498  1.00 23.56
ATOM    537  O   ILE   265       9.756  13.474  29.612  1.00 23.63
ATOM    538  N   THR   266       9.974  13.683  27.386  1.00 23.74
ATOM    539  CA  THR   266      11.419  13.510  27.391  1.00 22.48
ATOM    540  CB  THR   266      11.799  12.115  26.833  1.00 21.23
ATOM    541  OG1 THR   266      11.288  11.107  27.707  1.00 20.89
ATOM    542  CG2 THR   266      13.295  11.952  26.716  1.00 21.86
ATOM    543  C   THR   266      12.060  14.585  26.530  1.00 21.76
ATOM    544  O   THR   266      11.674  14.770  25.376  1.00 20.29
ATOM    545  N   TYR   267      12.981  15.341  27.119  1.00 21.86
ATOM    546  CA  TYR   267      13.702  16.372  26.388  1.00 22.28
ATOM    547  CB  TYR   267      13.833  17.654  27.211  1.00 22.75
ATOM    548  CG  TYR   267      12.563  18.464  27.278  1.00 24.36
ATOM    549  CD1 TYR   267      11.666  18.297  28.327  1.00 22.30
ATOM    550  CE1 TYR   267      10.493  19.034  28.386  1.00 22.80
ATOM    551  CD2 TYR   267      12.253  19.396  26.281  1.00 23.66
ATOM    552  CE2 TYR   267      11.080  20.139  26.332  1.00 24.13
ATOM    553  CZ  TYR   267      10.206  19.949  27.391  1.00 23.99
ATOM    554  OH  TYR   267       9.045  20.674  27.465  1.00 23.95
ATOM    555  C   TYR   267      15.078  15.805  26.108  1.00 22.43
ATOM    556  O   TYR   267      15.679  15.165  26.978  1.00 23.25
ATOM    557  N   SER   268      15.573  16.031  24.900  1.00 22.28
ATOM    558  CA  SER   268      16.884  15.532  24.512  1.00 22.21
ATOM    559  CB  SER   268      16.750  14.082  24.010  1.00 22.96
ATOM    560  OG  SER   268      17.948  13.556  23.441  1.00 19.87
ATOM    561  C   SER   268      17.484  16.401  23.419  1.00 22.55
ATOM    562  O   SER   268      16.774  17.111  22.706  1.00 23.40
ATOM    563  N   THR   269      18.809  16.391  23.348  1.00 23.70
ATOM    564  CA  THR   269      19.547  17.102  22.310  1.00 22.50
ATOM    565  CB  THR   269      21.031  17.245  22.694  1.00 22.70
ATOM    566  OG1 THR   269      21.510  15.986  23.193  1.00 19.49
ATOM    567  CG2 THR   269      21.218  18.313  23.744  1.00 20.70
ATOM    568  C   THR   269      19.495  16.149  21.110  1.00 22.45
ATOM    569  O   THR   269      19.222  14.950  21.269  1.00 22.71
ATOM    570  N   TYR   270      19.746  16.656  19.910  1.00 22.86
ATOM    571  CA  TYR   270      19.746  15.777  18.747  1.00 22.07
ATOM    572  CB  TYR   270      19.812  16.581  17.446  1.00 20.62
ATOM    573  CG  TYR   270      18.535  17.330  17.123  1.00 19.62
ATOM    574  CD1 TYR   270      18.392  18.677  17.452  1.00 20.22
ATOM    575  CE1 TYR   270      17.242  19.389  17.118  1.00 18.98
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FIGURE 1 (cont.)

ATOM	576	CD2	TYR	270	17.488	16.704	16.454	1.00	18.83
ATOM	577	CE2	TYR	270	16.331	17.406	16.115	1.00	20.81
ATOM	578	CZ	TYR	270	16.218	18.752	16.451	1.00	20.32
ATOM	579	OH	TYR	270	15.086	19.457	16.112	1.00	18.84
ATOM	580	C	TYR	270	20.943	14.828	18.852	1.00	21.56
ATOM	581	O	TYR	270	20.850	13.654	18.486	1.00	23.69
ATOM	582	N	GLY	271	22.043	15.333	19.406	1.00	19.54
ATOM	583	CA	GLY	271	23.242	14.534	19.555	1.00	19.07
ATOM	584	C	GLY	271	23.012	13.299	20.394	1.00	19.18
ATOM	585	O	GLY	271	23.330	12.192	19.980	1.00	19.27
ATOM	586	N	LYS	272	22.494	13.499	21.600	1.00	21.00
ATOM	587	CA	LYS	272	22.209	12.399	22.516	1.00	22.97
ATOM	588	CB	LYS	272	21.709	12.968	23.850	1.00	24.05
ATOM	589	CG	LYS	272	21.538	11.960	24.963	1.00	26.57
ATOM	590	CD	LYS	272	22.761	11.085	25.118	1.00	28.96
ATOM	591	CE	LYS	272	22.573	10.081	26.243	1.00	30.16
ATOM	592	NZ	LYS	272	23.623	9.033	26.198	1.00	31.88
ATOM	593	C	LYS	272	21.187	11.424	21.885	1.00	23.97
ATOM	594	O	LYS	272	21.351	10.198	21.964	1.00	24.73
ATOM	595	N	PHE	273	20.173	11.967	21.204	1.00	23.94
ATOM	596	CA	PHE	273	19.151	11.153	20.538	1.00	22.60
ATOM	597	CB	PHE	273	18.170	12.068	19.790	1.00	20.76
ATOM	598	CG	PHE	273	17.188	11.333	18.917	1.00	19.28
ATOM	599	CD1	PHE	273	16.138	10.611	19.476	1.00	19.37
ATOM	600	CD2	PHE	273	17.299	11.382	17.536	1.00	17.87
ATOM	601	CE1	PHE	273	15.211	9.951	18.670	1.00	18.22
ATOM	602	CE2	PHE	273	16.382	10.727	16.724	1.00	19.02
ATOM	603	CZ	PHE	273	15.334	10.010	17.293	1.00	17.46
ATOM	604	C	PHE	273	19.840	10.191	19.561	1.00	21.90
ATOM	605	O	PHE	273	19.619	8.970	19.580	1.00	20.97
ATOM	606	N	LEU	274	20.685	10.766	18.712	1.00	22.63
ATOM	607	CA	LEU	274	21.455	10.020	17.726	1.00	21.66
ATOM	608	CB	LEU	274	22.324	10.989	16.921	1.00	21.04
ATOM	609	CG	LEU	274	21.624	11.852	15.874	1.00	18.37
ATOM	610	CD1	LEU	274	22.546	12.969	15.437	1.00	16.98
ATOM	611	CD2	LEU	274	21.233	10.972	14.697	1.00	16.49
ATOM	612	C	LEU	274	22.346	8.971	18.403	1.00	21.93
ATOM	613	O	LEU	274	22.503	7.853	17.903	1.00	19.56
ATOM	614	N	ALA	275	22.944	9.362	19.525	1.00	23.03
ATOM	615	CA	ALA	275	23.818	8.493	20.300	1.00	24.57
ATOM	616	CB	ALA	275	24.585	9.301	21.322	1.00	21.93
ATOM	617	C	ALA	275	23.033	7.381	20.992	1.00	26.77
ATOM	618	O	ALA	275	23.580	6.302	21.237	1.00	28.37
ATOM	619	N	ASP	276	21.764	7.631	21.314	1.00	27.59
ATOM	620	CA	ASP	276	20.952	6.604	21.968	1.00	28.62
ATOM	621	CB	ASP	276	19.859	7.225	22.847	1.00	28.88
ATOM	622	CG	ASP	276	20.412	7.872	24.107	1.00	28.41
ATOM	623	OD1	ASP	276	21.515	7.500	24.553	1.00	28.79
ATOM	624	OD2	ASP	276	19.741	8.767	24.649	1.00	29.37
ATOM	625	C	ASP	276	20.350	5.614	20.971	1.00	29.04
ATOM	626	O	ASP	276	19.589	4.719	21.346	1.00	30.14
ATOM	627	N	GLY	277	20.700	5.775	19.701	1.00	29.48
ATOM	628	CA	GLY	277	20.201	4.876	18.677	1.00	29.82
ATOM	629	C	GLY	277	18.987	5.363	17.904	1.00	30.86
ATOM	630	O	GLY	277	18.343	4.574	17.211	1.00	31.50
ATOM	631	N	GLY	278	18.667	6.650	17.997	1.00	30.29
ATOM	632	CA	GLY	278	17.517	7.152	17.269	1.00	29.28
ATOM	633	C	GLY	278	16.193	6.655	17.827	1.00	28.58

FIGURE 1 (cont.)

ATOM	634	O	GLY	278	16.005	6.611	19.037	1.00	28.84
ATOM	635	N	CME	279	15.279	6.255	16.956	1.00	27.25
ATOM	636	CA	CME	279	13.973	5.792	17.394	1.00	28.61
ATOM	637	C	CME	279	13.976	4.530	18.265	1.00	30.15
ATOM	638	O	CME	279	13.004	4.243	18.959	1.00	31.77
ATOM	639	CB	CME	279	13.043	5.619	16.190	1.00	27.21
ATOM	640	SG	CME	279	12.348	7.190	15.561	1.00	27.85
ATOM	641	2SG	CME	279	11.574	8.053	17.229	1.00	28.77
ATOM	642	2CB	CME	279	9.954	7.230	17.445	1.00	24.45
ATOM	643	2CA	CME	279	9.943	5.999	18.329	1.00	22.60
ATOM	644	OG	CME	279	10.230	6.331	19.673	1.00	21.99
ATOM	645	N	SER	280	15.075	3.788	18.256	1.00	32.02
ATOM	646	CA	SER	280	15.171	2.566	19.054	1.00	31.88
ATOM	647	CB	SER	280	16.161	1.604	18.408	1.00	32.23
ATOM	648	OG	SER	280	17.471	2.145	18.447	1.00	33.11
ATOM	649	C	SER	280	15.637	2.873	20.467	1.00	32.76
ATOM	650	O	SER	280	15.710	1.978	21.299	1.00	34.40
ATOM	651	N	GLY	281	16.014	4.127	20.710	1.00	33.60
ATOM	652	CA	GLY	281	16.479	4.540	22.022	1.00	33.70
ATOM	653	C	GLY	281	15.357	4.781	23.017	1.00	34.64
ATOM	654	O	GLY	281	15.609	4.974	24.210	1.00	35.32
ATOM	655	N	GLY	282	14.119	4.767	22.531	1.00	34.83
ATOM	656	CA	GLY	282	12.963	4.979	23.388	1.00	34.77
ATOM	657	C	GLY	282	11.697	4.820	22.571	1.00	34.68
ATOM	658	O	GLY	282	11.780	4.727	21.346	1.00	36.05
ATOM	659	N	ALA	283	10.536	4.761	23.222	1.00	33.24
ATOM	660	CA	ALA	283	9.276	4.615	22.495	1.00	32.26
ATOM	661	CB	ALA	283	8.515	3.397	22.983	1.00	34.72
ATOM	662	C	ALA	283	8.479	5.879	22.732	1.00	31.42
ATOM	663	O	ALA	283	8.072	6.157	23.857	1.00	33.31
ATOM	664	N	TYR	284	8.286	6.655	21.673	1.00	29.86
ATOM	665	CA	TYR	284	7.590	7.930	21.756	1.00	26.87
ATOM	666	CB	TYR	284	8.586	9.068	21.499	1.00	25.67
ATOM	667	CG	TYR	284	9.898	8.953	22.270	1.00	25.12
ATOM	668	CD1	TYR	284	11.066	8.484	21.650	1.00	24.08
ATOM	669	CE1	TYR	284	12.280	8.406	22.342	1.00	23.42
ATOM	670	CD2	TYR	284	9.977	9.338	23.611	1.00	25.92
ATOM	671	CE2	TYR	284	11.186	9.263	24.316	1.00	26.34
ATOM	672	CZ	TYR	284	12.334	8.800	23.675	1.00	27.01
ATOM	673	OH	TYR	284	13.526	8.765	24.383	1.00	26.66
ATOM	674	C	TYR	284	6.501	7.977	20.706	1.00	27.07
ATOM	675	O	TYR	284	6.697	7.507	19.583	1.00	27.54
ATOM	676	N	ASP	285	5.360	8.562	21.060	1.00	26.33
ATOM	677	CA	ASP	285	4.237	8.665	20.128	1.00	25.48
ATOM	678	CB	ASP	285	2.906	8.695	20.888	1.00	27.66
ATOM	679	CG	ASP	285	2.754	7.540	21.867	1.00	29.66
ATOM	680	OD1	ASP	285	2.833	6.357	21.451	1.00	30.75
ATOM	681	OD2	ASP	285	2.537	7.822	23.060	1.00	30.49
ATOM	682	C	ASP	285	4.365	9.942	19.308	1.00	24.75
ATOM	683	O	ASP	285	4.021	9.982	18.122	1.00	24.16
ATOM	684	N	ILE	286	4.864	10.991	19.957	1.00	24.04
ATOM	685	CA	ILE	286	5.025	12.289	19.321	1.00	22.60
ATOM	686	CB	ILE	286	4.036	13.310	19.936	1.00	21.83
ATOM	687	CG2	ILE	286	4.185	14.677	19.265	1.00	19.78
ATOM	688	CG1	ILE	286	2.601	12.776	19.805	1.00	20.82
ATOM	689	CD1	ILE	286	1.539	13.664	20.395	1.00	19.00
ATOM	690	C	ILE	286	6.458	12.804	19.470	1.00	22.69
ATOM	691	O	ILE	286	7.052	12.730	20.556	1.00	22.52

FIGURE 1 (cont.)

ATOM	692	N	ILE	287	7.028	13.274	18.361	1.00	22.96
ATOM	693	CA	ILE	287	8.381	13.822	18.373	1.00	22.01
ATOM	694	CB	ILE	287	9.375	13.029	17.459	1.00	21.82
ATOM	695	CG2	ILE	287	10.741	13.732	17.432	1.00	20.37
ATOM	696	CG1	ILE	287	9.543	11.586	17.945	1.00	20.76
ATOM	697	CD1	ILE	287	8.661	10.601	17.227	1.00	19.72
ATOM	698	C	ILE	287	8.348	15.267	17.890	1.00	20.35
ATOM	699	O	ILE	287	7.944	15.540	16.756	1.00	18.88
ATOM	700	N	ILE	288	8.746	16.184	18.763	1.00	20.27
ATOM	701	CA	ILE	288	8.792	17.595	18.420	1.00	22.23
ATOM	702	CB	ILE	288	8.399	18.525	19.624	1.00	24.13
ATOM	703	CG2	ILE	288	8.370	19.992	19.183	1.00	23.03
ATOM	704	CG1	ILE	288	7.041	18.132	20.224	1.00	25.74
ATOM	705	CD1	ILE	288	5.866	18.329	19.292	1.00	27.52
ATOM	706	C	ILE	288	10.247	17.883	18.076	1.00	20.12
ATOM	707	O	ILE	288	11.118	17.740	18.925	1.00	20.16
ATOM	708	N	CYS	289	10.514	18.173	16.810	1.00	20.26
ATOM	709	CA	CYS	289	11.855	18.520	16.349	1.00	19.98
ATOM	710	CB	CYS	289	12.057	18.095	14.899	1.00	18.98
ATOM	711	SG	CYS	289	12.188	16.314	14.684	1.00	18.93
ATOM	712	C	CYS	289	11.916	20.030	16.466	1.00	20.28
ATOM	713	O	CYS	289	11.550	20.757	15.542	1.00	21.53
ATOM	714	N	ASP	290	12.322	20.482	17.642	1.00	20.55
ATOM	715	CA	ASP	290	12.407	21.892	17.969	1.00	22.05
ATOM	716	CB	ASP	290	12.530	22.030	19.490	1.00	22.57
ATOM	717	CG	ASP	290	12.197	23.413	19.979	1.00	24.81
ATOM	718	OD1	ASP	290	12.731	23.789	21.040	1.00	25.61
ATOM	719	OD2	ASP	290	11.410	24.127	19.312	1.00	27.06
ATOM	720	C	ASP	290	13.564	22.591	17.247	1.00	22.93
ATOM	721	O	ASP	290	14.611	21.983	17.004	1.00	24.56
ATOM	722	N	GLU	291	13.364	23.866	16.905	1.00	22.47
ATOM	723	CA	GLU	291	14.361	24.674	16.190	1.00	21.59
ATOM	724	CB	GLU	291	15.600	24.947	17.055	1.00	22.46
ATOM	725	CG	GLU	291	15.341	25.261	18.533	1.00	23.21
ATOM	726	CD	GLU	291	14.639	26.573	18.786	1.00	24.42
ATOM	727	OE1	GLU	291	14.159	27.222	17.840	1.00	27.28
ATOM	728	OE2	GLU	291	14.552	26.961	19.964	1.00	28.33
ATOM	729	C	GLU	291	14.783	23.938	14.922	1.00	20.30
ATOM	730	O	GLU	291	15.945	23.954	14.535	1.00	20.16
ATOM	731	N	CYS	292	13.804	23.375	14.228	1.00	20.51
ATOM	732	CA	CYS	292	14.057	22.608	13.021	1.00	20.48
ATOM	733	CB	CYS	292	12.762	21.929	12.573	1.00	21.07
ATOM	734	SG	CYS	292	11.485	23.089	12.067	1.00	22.23
ATOM	735	C	CYS	292	14.682	23.411	11.880	1.00	19.98
ATOM	736	O	CYS	292	14.876	22.906	10.777	1.00	18.04
ATOM	737	N	HIS	293	14.962	24.683	12.144	1.00	22.14
ATOM	738	CA	HIS	293	15.592	25.557	11.157	1.00	22.17
ATOM	739	CB	HIS	293	15.198	27.009	11.419	1.00	20.03
ATOM	740	CG	HIS	293	15.718	27.534	12.718	1.00	20.67
ATOM	741	CD2	HIS	293	16.944	27.991	13.068	1.00	20.00
ATOM	742	ND1	HIS	293	14.962	27.549	13.868	1.00	21.26
ATOM	743	CE1	HIS	293	15.701	27.986	14.872	1.00	21.87
ATOM	744	NE2	HIS	293	16.907	28.261	14.413	1.00	20.16
ATOM	745	C	HIS	293	17.121	25.434	11.259	1.00	22.50
ATOM	746	O	HIS	293	17.834	25.959	10.414	1.00	23.46
ATOM	747	N	SER	294	17.611	24.787	12.319	1.00	23.32
ATOM	748	CA	SER	294	19.049	24.621	12.553	1.00	23.42
ATOM	749	CB	SER	294	19.294	23.913	13.878	1.00	21.98

FIGURE 1 (cont.)

```
ATOM    750  OG  SER   294      18.708  24.650  14.930  1.00 25.79
ATOM    751  C   SER   294      19.767  23.878  11.441  1.00 24.00
ATOM    752  O   SER   294      19.379  22.774  11.061  1.00 24.59
ATOM    753  N   THR   295      20.845  24.473  10.946  1.00 24.29
ATOM    754  CA  THR   295      21.590  23.866   9.868  1.00 24.56
ATOM    755  CB  THR   295      21.764  24.855   8.697  1.00 25.03
ATOM    756  OG1 THR   295      22.307  26.091   9.175  1.00 24.69
ATOM    757  CG2 THR   295      20.411  25.132   8.038  1.00 24.54
ATOM    758  C   THR   295      22.916  23.247  10.297  1.00 25.11
ATOM    759  O   THR   295      23.773  22.952   9.467  1.00 25.90
ATOM    760  N   ASP   296      23.083  23.035  11.596  1.00 24.58
ATOM    761  CA  ASP   296      24.297  22.405  12.097  1.00 25.65
ATOM    762  CB  ASP   296      24.430  22.642  13.593  1.00 28.87
ATOM    763  CG  ASP   296      23.307  22.010  14.372  1.00 32.27
ATOM    764  OD1 ASP   296      22.182  22.547  14.308  1.00 34.23
ATOM    765  OD2 ASP   296      23.541  20.956  15.009  1.00 35.53
ATOM    766  C   ASP   296      24.142  20.904  11.806  1.00 24.87
ATOM    767  O   ASP   296      23.027  20.374  11.883  1.00 24.43
ATOM    768  N   ALA   297      25.251  20.220  11.524  1.00 23.24
ATOM    769  CA  ALA   297      25.228  18.796  11.185  1.00 22.47
ATOM    770  CB  ALA   297      26.633  18.247  11.066  1.00 20.82
ATOM    771  C   ALA   297      24.414  17.923  12.122  1.00 21.78
ATOM    772  O   ALA   297      23.643  17.079  11.672  1.00 22.68
ATOM    773  N   THR   298      24.571  18.134  13.420  1.00 22.79
ATOM    774  CA  THR   298      23.846  17.338  14.404  1.00 24.28
ATOM    775  CB  THR   298      24.334  17.649  15.813  1.00 24.90
ATOM    776  OG1 THR   298      25.767  17.588  15.822  1.00 26.90
ATOM    777  CG2 THR   298      23.780  16.639  16.800  1.00 24.31
ATOM    778  C   THR   298      22.320  17.460  14.321  1.00 21.89
ATOM    779  O   THR   298      21.614  16.458  14.441  1.00 21.95
ATOM    780  N   SER   299      21.817  18.665  14.074  1.00 20.47
ATOM    781  CA  SER   299      20.373  18.865  13.969  1.00 19.52
ATOM    782  CB  SER   299      20.025  20.352  14.038  1.00 16.97
ATOM    783  OG  SER   299      20.393  20.874  15.300  1.00 15.99
ATOM    784  C   SER   299      19.835  18.243  12.688  1.00 18.61
ATOM    785  O   SER   299      18.810  17.570  12.698  1.00 18.83
ATOM    786  N   ILE   300      20.567  18.418  11.597  1.00 18.65
ATOM    787  CA  ILE   300      20.155  17.863  10.322  1.00 19.88
ATOM    788  CB  ILE   300      21.085  18.343   9.190  1.00 20.48
ATOM    789  CG2 ILE   300      20.691  17.693   7.846  1.00 19.34
ATOM    790  CG1 ILE   300      21.022  19.867   9.098  1.00 19.44
ATOM    791  CD1 ILE   300      22.063  20.436   8.226  1.00 20.43
ATOM    792  C   ILE   300      20.135  16.337  10.358  1.00 20.31
ATOM    793  O   ILE   300      19.194  15.717   9.867  1.00 21.85
ATOM    794  N   LEU   301      21.161  15.733  10.950  1.00 20.00
ATOM    795  CA  LEU   301      21.243  14.280  11.022  1.00 19.61
ATOM    796  CB  LEU   301      22.626  13.852  11.516  1.00 20.91
ATOM    797  CG  LEU   301      22.986  12.379  11.326  1.00 23.01
ATOM    798  CD1 LEU   301      23.023  12.031   9.851  1.00 21.44
ATOM    799  CD2 LEU   301      24.336  12.111  11.964  1.00 24.76
ATOM    800  C   LEU   301      20.156  13.742  11.942  1.00 19.65
ATOM    801  O   LEU   301      19.517  12.729  11.642  1.00 19.47
ATOM    802  N   GLY   302      19.929  14.450  13.044  1.00 19.18
ATOM    803  CA  GLY   302      18.919  14.048  14.002  1.00 18.63
ATOM    804  C   GLY   302      17.522  14.119  13.425  1.00 19.58
ATOM    805  O   GLY   302      16.731  13.194  13.606  1.00 20.16
ATOM    806  N   ILE   303      17.220  15.206  12.719  1.00 19.27
ATOM    807  CA  ILE   303      15.906  15.383  12.113  1.00 19.24
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FIGURE 1 (cont.)

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ATOM    808  CB  ILE   303      15.732  16.799  11.518  1.00 18.46
ATOM    809  CG2 ILE   303      14.466  16.879  10.680  1.00 19.48
ATOM    810  CG1 ILE   303      15.646  17.818  12.653  1.00 18.58
ATOM    811  CD1 ILE   303      15.483  19.232  12.199  1.00 19.42
ATOM    812  C   ILE   303      15.675  14.324  11.057  1.00 19.21
ATOM    813  O   ILE   303      14.631  13.685  11.044  1.00 21.27
ATOM    814  N   GLY   304      16.662  14.120  10.191  1.00 20.04
ATOM    815  CA  GLY   304      16.547  13.110   9.160  1.00 20.49
ATOM    816  C   GLY   304      16.323  11.730   9.765  1.00 21.95
ATOM    817  O   GLY   304      15.555  10.930   9.226  1.00 22.92
ATOM    818  N   THR   305      17.009  11.435  10.869  1.00 22.89
ATOM    819  CA  THR   305      16.854  10.150  11.552  1.00 23.21
ATOM    820  CB  THR   305      17.722  10.087  12.830  1.00 22.58
ATOM    821  OG1 THR   305      19.101  10.155  12.458  1.00 26.30
ATOM    822  CG2 THR   305      17.494   8.794  13.603  1.00 20.55
ATOM    823  C   THR   305      15.377   9.988  11.919  1.00 23.59
ATOM    824  O   THR   305      14.734   9.028  11.504  1.00 22.98
ATOM    825  N   VAL   306      14.830  10.974  12.632  1.00 24.39
ATOM    826  CA  VAL   306      13.423  10.954  13.039  1.00 22.55
ATOM    827  CB  VAL   306      13.022  12.258  13.751  1.00 19.96
ATOM    828  CG1 VAL   306      11.516  12.293  13.977  1.00 19.45
ATOM    829  CG2 VAL   306      13.748  12.380  15.061  1.00 18.75
ATOM    830  C   VAL   306      12.499  10.773  11.837  1.00 21.61
ATOM    831  O   VAL   306      11.629   9.908  11.840  1.00 22.37
ATOM    832  N   LEU   307      12.701  11.581  10.805  1.00 21.43
ATOM    833  CA  LEU   307      11.855  11.513   9.622  1.00 21.34
ATOM    834  CB  LEU   307      12.238  12.605   8.626  1.00 19.20
ATOM    835  CG  LEU   307      11.804  14.002   9.057  1.00 17.60
ATOM    836  CD1 LEU   307      12.361  15.033   8.111  1.00 17.57
ATOM    837  CD2 LEU   307      10.293  14.074   9.095  1.00 16.93
ATOM    838  C   LEU   307      11.891  10.155   8.960  1.00 22.33
ATOM    839  O   LEU   307      10.875   9.661   8.490  1.00 24.71
ATOM    840  N   ASP   308      13.051   9.522   8.971  1.00 23.84
ATOM    841  CA  ASP   308      13.184   8.221   8.356  1.00 23.32
ATOM    842  CB  ASP   308      14.655   7.938   8.062  1.00 23.50
ATOM    843  CG  ASP   308      14.859   6.634   7.316  1.00 23.73
ATOM    844  OD1 ASP   308      14.468   6.559   6.136  1.00 25.35
ATOM    845  OD2 ASP   308      15.403   5.682   7.907  1.00 22.72
ATOM    846  C   ASP   308      12.617   7.111   9.230  1.00 23.73
ATOM    847  O   ASP   308      11.878   6.259   8.752  1.00 24.61
ATOM    848  N   GLN   309      12.927   7.159  10.518  1.00 23.54
ATOM    849  CA  GLN   309      12.529   6.130  11.465  1.00 24.40
ATOM    850  CB  GLN   309      13.609   6.003  12.538  1.00 24.46
ATOM    851  CG  GLN   309      14.985   5.638  12.022  1.00 24.18
ATOM    852  CD  GLN   309      16.023   5.622  13.128  1.00 23.84
ATOM    853  OE1 GLN   309      15.702   5.805  14.301  1.00 24.42
ATOM    854  NE2 GLN   309      17.276   5.415  12.760  1.00 25.37
ATOM    855  C   GLN   309      11.169   6.173  12.168  1.00 26.09
ATOM    856  O   GLN   309      10.580   5.116  12.401  1.00 25.68
ATOM    857  N   ALA   310      10.698   7.367  12.537  1.00 27.06
ATOM    858  CA  ALA   310       9.432   7.554  13.273  1.00 28.07
ATOM    859  CB  ALA   310       8.983   9.012  13.224  1.00 27.02
ATOM    860  C   ALA   310       8.251   6.646  12.956  1.00 28.11
ATOM    861  O   ALA   310       7.831   5.866  13.814  1.00 28.35
ATOM    862  N   GLU   311       7.714   6.735  11.742  1.00 29.49
ATOM    863  CA  GLU   311       6.560   5.916  11.376  1.00 31.72
ATOM    864  CB  GLU   311       6.125   6.161   9.932  1.00 31.31
ATOM    865  CG  GLU   311       4.847   5.405   9.558  1.00 33.59
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FIGURE 1 (cont.)

ATOM	866	CD	GLU	311	4.180	5.925	8.291	1.00	34.98
ATOM	867	OE1	GLU	311	2.993	5.602	8.065	1.00	36.53
ATOM	868	OE2	GLU	311	4.834	6.657	7.519	1.00	37.12
ATOM	869	C	GLU	311	6.784	4.429	11.614	1.00	33.13
ATOM	870	O	GLU	311	5.993	3.784	12.303	1.00	35.45
ATOM	871	N	THR	312	7.880	3.898	11.085	1.00	32.86
ATOM	872	CA	THR	312	8.200	2.487	11.249	1.00	32.32
ATOM	873	CB	THR	312	9.488	2.140	10.477	1.00	32.72
ATOM	874	OG1	THR	312	9.289	2.449	9.092	1.00	33.20
ATOM	875	CG2	THR	312	9.829	0.661	10.611	1.00	31.35
ATOM	876	C	THR	312	8.329	2.104	12.727	1.00	31.60
ATOM	877	O	THR	312	8.016	0.980	13.114	1.00	32.69
ATOM	878	N	ALA	313	8.741	3.057	13.554	1.00	30.31
ATOM	879	CA	ALA	313	8.899	2.806	14.977	1.00	29.28
ATOM	880	CB	ALA	313	9.949	3.731	15.563	1.00	28.71
ATOM	881	C	ALA	313	7.575	2.950	15.722	1.00	28.65
ATOM	882	O	ALA	313	7.520	2.786	16.939	1.00	29.03
ATOM	883	N	GLY	314	6.514	3.278	14.996	1.00	28.36
ATOM	884	CA	GLY	314	5.207	3.409	15.618	1.00	29.07
ATOM	885	C	GLY	314	4.836	4.749	16.231	1.00	28.95
ATOM	886	O	GLY	314	4.048	4.822	17.173	1.00	28.57
ATOM	887	N	ALA	315	5.418	5.821	15.724	1.00	29.15
ATOM	888	CA	ALA	315	5.080	7.131	16.239	1.00	27.89
ATOM	889	CB	ALA	315	6.218	8.106	15.987	1.00	27.99
ATOM	890	C	ALA	315	3.820	7.561	15.499	1.00	27.19
ATOM	891	O	ALA	315	3.509	7.042	14.421	1.00	25.84
ATOM	892	N	ARG	316	3.090	8.493	16.092	1.00	27.55
ATOM	893	CA	ARG	316	1.863	9.010	15.502	1.00	27.08
ATOM	894	CB	ARG	316	0.777	9.155	16.582	1.00	31.00
ATOM	895	CG	ARG	316	-0.529	9.805	16.099	1.00	35.35
ATOM	896	CD	ARG	316	-1.404	8.835	15.306	1.00	38.97
ATOM	897	NE	ARG	316	-1.989	7.798	16.158	1.00	42.10
ATOM	898	CZ	ARG	316	-2.953	8.008	17.055	1.00	43.29
ATOM	899	NH1	ARG	316	-3.462	9.220	17.232	1.00	43.63
ATOM	900	NH2	ARG	316	-3.393	7.004	17.799	1.00	43.76
ATOM	901	C	ARG	316	2.095	10.366	14.854	1.00	25.15
ATOM	902	O	ARG	316	1.521	10.679	13.805	1.00	25.12
ATOM	903	N	LEU	317	2.962	11.164	15.457	1.00	22.37
ATOM	904	CA	LEU	317	3.185	12.493	14.931	1.00	20.99
ATOM	905	CB	LEU	317	2.234	13.482	15.648	1.00	18.70
ATOM	906	CG	LEU	317	2.297	14.999	15.402	1.00	16.65
ATOM	907	CD1	LEU	317	1.898	15.327	13.972	1.00	15.36
ATOM	908	CD2	LEU	317	1.384	15.723	16.375	1.00	16.28
ATOM	909	C	LEU	317	4.612	12.987	15.060	1.00	21.09
ATOM	910	O	LEU	317	5.293	12.705	16.053	1.00	21.51
ATOM	911	N	VAL	318	5.061	13.686	14.020	1.00	20.92
ATOM	912	CA	VAL	318	6.368	14.319	14.009	1.00	21.69
ATOM	913	CB	VAL	318	7.324	13.760	12.924	1.00	21.79
ATOM	914	CG1	VAL	318	8.541	14.686	12.772	1.00	20.61
ATOM	915	CG2	VAL	318	7.801	12.375	13.320	1.00	21.19
ATOM	916	C	VAL	318	6.061	15.787	13.736	1.00	21.64
ATOM	917	O	VAL	318	5.367	16.112	12.767	1.00	20.75
ATOM	918	N	VAL	319	6.523	16.660	14.626	1.00	21.64
ATOM	919	CA	VAL	319	6.291	18.088	14.489	1.00	21.71
ATOM	920	CB	VAL	319	5.581	18.679	15.751	1.00	21.72
ATOM	921	CG1	VAL	319	5.321	20.171	15.579	1.00	19.36
ATOM	922	CG2	VAL	319	4.280	17.947	16.020	1.00	21.02
ATOM	923	C	VAL	319	7.619	18.793	14.308	1.00	20.25

FIGURE 1 (cont.)

ATOM	924	O	VAL	319	8.520	18.635	15.127	1.00	19.92
ATOM	925	N	LEU	320	7.739	19.555	13.226	1.00	20.09
ATOM	926	CA	LEU	320	8.946	20.323	12.934	1.00	18.99
ATOM	927	CB	LEU	320	9.276	20.236	11.442	1.00	18.78
ATOM	928	CG	LEU	320	9.265	18.835	10.803	1.00	20.01
ATOM	929	CD1	LEU	320	9.449	18.951	9.309	1.00	20.04
ATOM	930	CD2	LEU	320	10.342	17.940	11.400	1.00	20.17
ATOM	931	C	LEU	320	8.609	21.754	13.352	1.00	17.86
ATOM	932	O	LEU	320	7.887	22.459	12.655	1.00	17.59
ATOM	933	N	ALA	321	9.102	22.160	14.515	1.00	18.47
ATOM	934	CA	ALA	321	8.807	23.476	15.055	1.00	20.27
ATOM	935	CB	ALA	321	8.365	23.354	16.522	1.00	19.53
ATOM	936	C	ALA	321	9.926	24.499	14.935	1.00	22.46
ATOM	937	O	ALA	321	11.105	24.199	15.192	1.00	22.78
ATOM	938	N	THR	322	9.531	25.732	14.615	1.00	23.57
ATOM	939	CA	THR	322	10.463	26.839	14.463	1.00	24.42
ATOM	940	CB	THR	322	11.384	26.632	13.224	1.00	23.87
ATOM	941	OG1	THR	322	12.368	27.677	13.159	1.00	22.26
ATOM	942	CG2	THR	322	10.561	26.606	11.935	1.00	20.90
ATOM	943	C	THR	322	9.721	28.166	14.301	1.00	25.40
ATOM	944	O	THR	322	8.632	28.227	13.719	1.00	25.14
ATOM	945	N	ALA	323	10.317	29.220	14.841	1.00	25.81
ATOM	946	CA	ALA	323	9.768	30.559	14.729	1.00	25.79
ATOM	947	CB	ALA	323	10.219	31.412	15.902	1.00	25.93
ATOM	948	C	ALA	323	10.288	31.153	13.423	1.00	26.98
ATOM	949	O	ALA	323	9.758	32.153	12.932	1.00	28.83
ATOM	950	N	THR	324	11.325	30.531	12.862	1.00	25.90
ATOM	951	CA	THR	324	11.925	31.003	11.617	1.00	24.88
ATOM	952	CB	THR	324	13.319	31.611	11.876	1.00	24.01
ATOM	953	OG1	THR	324	14.106	30.689	12.641	1.00	25.50
ATOM	954	CG2	THR	324	13.201	32.908	12.648	1.00	23.67
ATOM	955	C	THR	324	12.048	29.943	10.508	1.00	24.40
ATOM	956	O	THR	324	13.123	29.369	10.293	1.00	24.97
ATOM	957	N	PRO	325	10.935	29.624	9.829	1.00	22.47
ATOM	958	CD	PRO	325	9.557	30.088	10.041	1.00	21.14
ATOM	959	CA	PRO	325	10.978	28.634	8.755	1.00	22.40
ATOM	960	CB	PRO	325	9.500	28.446	8.422	1.00	20.85
ATOM	961	CG	PRO	325	8.922	29.769	8.720	1.00	19.94
ATOM	962	C	PRO	325	11.756	29.190	7.559	1.00	23.10
ATOM	963	O	PRO	325	12.008	30.396	7.486	1.00	23.30
ATOM	964	N	PRO	326	12.159	28.319	6.609	1.00	23.99
ATOM	965	CD	PRO	326	12.034	26.849	6.583	1.00	23.51
ATOM	966	CA	PRO	326	12.908	28.793	5.437	1.00	23.61
ATOM	967	CB	PRO	326	12.949	27.553	4.544	1.00	22.60
ATOM	968	CG	PRO	326	13.058	26.456	5.545	1.00	22.79
ATOM	969	C	PRO	326	12.245	29.985	4.740	1.00	22.55
ATOM	970	O	PRO	326	11.019	30.087	4.696	1.00	23.41
ATOM	971	N	GLY	327	13.070	30.901	4.249	1.00	20.16
ATOM	972	CA	GLY	327	12.576	32.077	3.561	1.00	20.04
ATOM	973	C	GLY	327	12.224	33.207	4.501	1.00	20.56
ATOM	974	O	GLY	327	11.681	34.216	4.075	1.00	21.64
ATOM	975	N	SER	328	12.544	33.044	5.779	1.00	22.07
ATOM	976	CA	SER	328	12.245	34.056	6.783	1.00	21.35
ATOM	977	CB	SER	328	12.379	33.466	8.189	1.00	20.72
ATOM	978	OG	SER	328	11.326	32.565	8.454	1.00	20.21
ATOM	979	C	SER	328	13.088	35.322	6.689	1.00	22.21
ATOM	980	O	SER	328	14.185	35.333	6.115	1.00	21.32
ATOM	981	N	VAL	329	12.552	36.387	7.275	1.00	21.78

FIGURE 1 (cont.)

ATOM	982	CA	VAL	329	13.207	37.678	7.325	1.00	21.67
ATOM	983	CB	VAL	329	12.634	38.651	6.278	1.00	21.56
ATOM	984	CG1	VAL	329	13.039	38.203	4.867	1.00	21.42
ATOM	985	CG2	VAL	329	11.123	38.747	6.410	1.00	19.14
ATOM	986	C	VAL	329	12.960	38.192	8.737	1.00	21.96
ATOM	987	O	VAL	329	12.080	37.683	9.424	1.00	21.78
ATOM	988	N	THR	330	13.786	39.132	9.187	1.00	23.09
ATOM	989	CA	THR	330	13.681	39.708	10.523	1.00	24.47
ATOM	990	CB	THR	330	15.073	40.131	11.047	1.00	24.34
ATOM	991	OG1	THR	330	15.958	39.009	10.972	1.00	25.56
ATOM	992	CG2	THR	330	14.997	40.577	12.490	1.00	23.96
ATOM	993	C	THR	330	12.719	40.888	10.521	1.00	25.81
ATOM	994	O	THR	330	13.062	42.014	10.134	1.00	25.19
ATOM	995	N	VAL	331	11.507	40.600	10.972	1.00	27.46
ATOM	996	CA	VAL	331	10.415	41.558	11.029	1.00	29.93
ATOM	997	CB	VAL	331	9.065	40.789	10.871	1.00	30.69
ATOM	998	CG1	VAL	331	7.885	41.620	11.359	1.00	33.40
ATOM	999	CG2	VAL	331	8.871	40.366	9.408	1.00	28.41
ATOM	1000	C	VAL	331	10.431	42.356	12.330	1.00	30.66
ATOM	1001	O	VAL	331	10.942	41.880	13.347	1.00	30.44
ATOM	1002	N	PRO	332	9.923	43.601	12.296	1.00	31.80
ATOM	1003	CD	PRO	332	9.525	44.351	11.088	1.00	32.94
ATOM	1004	CA	PRO	332	9.868	44.471	13.469	1.00	32.90
ATOM	1005	CB	PRO	332	8.882	45.544	13.029	1.00	33.03
ATOM	1006	CG	PRO	332	9.299	45.772	11.616	1.00	32.19
ATOM	1007	C	PRO	332	9.403	43.751	14.726	1.00	33.35
ATOM	1008	O	PRO	332	8.539	42.879	14.673	1.00	33.22
ATOM	1009	N	HIS	333	10.042	44.092	15.840	1.00	34.93
ATOM	1010	CA	HIS	333	9.747	43.526	17.149	1.00	35.66
ATOM	1011	CB	HIS	333	11.040	43.034	17.801	1.00	35.75
ATOM	1012	CG	HIS	333	10.864	42.519	19.196	1.00	35.91
ATOM	1013	CD2	HIS	333	11.036	41.281	19.717	1.00	37.50
ATOM	1014	ND1	HIS	333	10.494	43.327	20.250	1.00	35.51
ATOM	1015	CE1	HIS	333	10.448	42.610	21.359	1.00	35.57
ATOM	1016	NE2	HIS	333	10.774	41.366	21.063	1.00	37.41
ATOM	1017	C	HIS	333	9.152	44.666	17.967	1.00	36.79
ATOM	1018	O	HIS	333	9.616	45.804	17.878	1.00	37.38
ATOM	1019	N	PRO	334	8.174	44.362	18.833	1.00	37.08
ATOM	1020	CD	PRO	334	7.664	43.006	19.111	1.00	36.74
ATOM	1021	CA	PRO	334	7.509	45.364	19.680	1.00	37.36
ATOM	1022	CB	PRO	334	6.622	44.508	20.589	1.00	38.15
ATOM	1023	CG	PRO	334	6.344	43.286	19.753	1.00	38.80
ATOM	1024	C	PRO	334	8.458	46.225	20.521	1.00	37.12
ATOM	1025	O	PRO	334	8.426	47.448	20.447	1.00	37.73
ATOM	1026	N	ASN	335	9.283	45.564	21.330	1.00	36.19
ATOM	1027	CA	ASN	335	10.231	46.226	22.228	1.00	35.31
ATOM	1028	CB	ASN	335	10.616	45.294	23.385	1.00	36.70
ATOM	1029	CG	ASN	335	9.433	44.782	24.146	1.00	38.17
ATOM	1030	OD1	ASN	335	8.393	45.429	24.192	1.00	41.02
ATOM	1031	ND2	ASN	335	9.579	43.602	24.751	1.00	37.75
ATOM	1032	C	ASN	335	11.547	46.676	21.640	1.00	33.43
ATOM	1033	O	ASN	335	12.410	47.100	22.404	1.00	35.07
ATOM	1034	N	ILE	336	11.732	46.613	20.325	1.00	30.99
ATOM	1035	CA	ILE	336	13.043	46.972	19.783	1.00	27.79
ATOM	1036	CB	ILE	336	13.771	45.706	19.242	1.00	26.56
ATOM	1037	CG2	ILE	336	15.209	46.038	18.847	1.00	23.81
ATOM	1038	CG1	ILE	336	13.786	44.609	20.312	1.00	24.10
ATOM	1039	CD1	ILE	336	14.260	43.272	19.819	1.00	22.21

FIGURE 1 (cont.)

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ATOM   1040  C   ILE   336      13.131  48.077  18.738  1.00 28.12
ATOM   1041  O   ILE   336      12.731  47.896  17.588  1.00 28.53
ATOM   1042  N   GLU   337      13.694  49.213  19.128  1.00 27.62
ATOM   1043  CA  GLU   337      13.879  50.309  18.189  1.00 28.28
ATOM   1044  CB  GLU   337      14.019  51.634  18.931  1.00 29.84
ATOM   1045  CG  GLU   337      14.335  52.802  18.002  1.00 33.89
ATOM   1046  CD  GLU   337      14.754  54.067  18.730  1.00 36.64
ATOM   1047  OE1 GLU   337      14.866  54.049  19.978  1.00 39.22
ATOM   1048  OE2 GLU   337      14.987  55.084  18.041  1.00 38.86
ATOM   1049  C   GLU   337      15.168  50.031  17.401  1.00 27.48
ATOM   1050  O   GLU   337      16.224  49.807  17.990  1.00 27.75
ATOM   1051  N   GLU   338      15.092  50.053  16.078  1.00 26.13
ATOM   1052  CA  GLU   338      16.264  49.791  15.260  1.00 25.01
ATOM   1053  CB  GLU   338      15.939  48.745  14.200  1.00 25.16
ATOM   1054  CG  GLU   338      15.433  47.431  14.770  1.00 26.26
ATOM   1055  CD  GLU   338      15.271  46.355  13.720  1.00 25.40
ATOM   1056  OE1 GLU   338      14.396  45.490  13.896  1.00 26.96
ATOM   1057  OE2 GLU   338      16.020  46.363  12.723  1.00 26.71
ATOM   1058  C   GLU   338      16.794  51.050  14.594  1.00 25.30
ATOM   1059  O   GLU   338      16.033  51.835  14.033  1.00 27.51
ATOM   1060  N   VAL   339      18.103  51.250  14.646  1.00 24.09
ATOM   1061  CA  VAL   339      18.690  52.421  14.027  1.00 22.82
ATOM   1062  CB  VAL   339      18.667  53.653  14.986  1.00 22.08
ATOM   1063  CG1 VAL   339      18.756  53.221  16.424  1.00 21.99
ATOM   1064  CG2 VAL   339      19.763  54.646  14.637  1.00 19.75
ATOM   1065  C   VAL   339      20.064  52.174  13.411  1.00 22.67
ATOM   1066  O   VAL   339      20.951  51.593  14.027  1.00 23.55
ATOM   1067  N   ALA   340      20.189  52.567  12.150  1.00 22.35
ATOM   1068  CA  ALA   340      21.416  52.428  11.384  1.00 23.06
ATOM   1069  CB  ALA   340      21.169  52.877   9.952  1.00 20.82
ATOM   1070  C   ALA   340      22.559  53.240  11.969  1.00 23.85
ATOM   1071  O   ALA   340      22.354  54.337  12.485  1.00 25.71
ATOM   1072  N   LEU   341      23.761  52.686  11.929  1.00 23.84
ATOM   1073  CA  LEU   341      24.920  53.417  12.404  1.00 23.48
ATOM   1074  CB  LEU   341      26.069  52.468  12.729  1.00 22.83
ATOM   1075  CG  LEU   341      25.938  51.583  13.960  1.00 21.53
ATOM   1076  CD1 LEU   341      27.012  50.509  13.925  1.00 22.65
ATOM   1077  CD2 LEU   341      26.054  52.427  15.203  1.00 21.05
ATOM   1078  C   LEU   341      25.307  54.276  11.206  1.00 25.07
ATOM   1079  O   LEU   341      24.967  53.939  10.064  1.00 25.58
ATOM   1080  N   SER   342      25.988  55.388  11.459  1.00 25.28
ATOM   1081  CA  SER   342      26.426  56.272  10.391  1.00 25.74
ATOM   1082  CB  SER   342      25.832  57.680  10.569  1.00 25.63
ATOM   1083  OG  SER   342      26.162  58.252  11.831  1.00 26.66
ATOM   1084  C   SER   342      27.946  56.313  10.422  1.00 26.04
ATOM   1085  O   SER   342      28.588  55.459  11.030  1.00 26.02
ATOM   1086  N   THR   343      28.528  57.276   9.727  1.00 27.63
ATOM   1087  CA  THR   343      29.972  57.416   9.712  1.00 28.59
ATOM   1088  CB  THR   343      30.429  58.057   8.404  1.00 29.62
ATOM   1089  OG1 THR   343      29.514  59.101   8.050  1.00 30.43
ATOM   1090  CG2 THR   343      30.455  57.019   7.302  1.00 32.51
ATOM   1091  C   THR   343      30.422  58.275  10.890  1.00 28.11
ATOM   1092  O   THR   343      31.614  58.399  11.171  1.00 29.07
ATOM   1093  N   THR   344      29.459  58.863  11.583  1.00 27.10
ATOM   1094  CA  THR   344      29.767  59.710  12.714  1.00 27.21
ATOM   1095  CB  THR   344      28.729  60.827  12.825  1.00 27.65
ATOM   1096  OG1 THR   344      28.658  61.514  11.568  1.00 28.57
ATOM   1097  CG2 THR   344      29.100  61.805  13.924  1.00 27.24
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FIGURE 1 (cont.)

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ATOM   1098  C   THR   344      29.842  58.908  14.008  1.00 27.63
ATOM   1099  O   THR   344      28.884  58.225  14.396  1.00 27.69
ATOM   1100  N   GLY   345      31.003  58.969  14.649  1.00 26.95
ATOM   1101  CA  GLY   345      31.211  58.260  15.890  1.00 26.75
ATOM   1102  C   GLY   345      32.688  58.168  16.189  1.00 28.21
ATOM   1103  O   GLY   345      33.512  58.276  15.285  1.00 28.29
ATOM   1104  N   GLU   346      33.023  57.926  17.451  1.00 28.51
ATOM   1105  CA  GLU   346      34.414  57.832  17.863  1.00 29.04
ATOM   1106  CB  GLU   346      34.541  58.020  19.378  1.00 30.35
ATOM   1107  CG  GLU   346      34.291  59.439  19.880  1.00 32.52
ATOM   1108  CD  GLU   346      32.888  59.926  19.593  1.00 32.87
ATOM   1109  OE1 GLU   346      31.929  59.174  19.854  1.00 32.23
ATOM   1110  OE2 GLU   346      32.747  61.057  19.086  1.00 35.06
ATOM   1111  C   GLU   346      35.084  56.523  17.479  1.00 28.20
ATOM   1112  O   GLU   346      36.283  56.502  17.218  1.00 29.40
ATOM   1113  N   ILE   347      34.321  55.431  17.457  1.00 28.52
ATOM   1114  CA  ILE   347      34.889  54.110  17.153  1.00 26.91
ATOM   1115  CB  ILE   347      34.453  53.035  18.192  1.00 27.90
ATOM   1116  CG2 ILE   347      35.250  51.776  18.005  1.00 28.31
ATOM   1117  CG1 ILE   347      34.645  53.537  19.620  1.00 29.70
ATOM   1118  CD1 ILE   347      33.400  54.194  20.186  1.00 32.81
ATOM   1119  C   ILE   347      34.551  53.550  15.781  1.00 24.52
ATOM   1120  O   ILE   347      33.392  53.258  15.490  1.00 23.00
ATOM   1121  N   PRO   348      35.559  53.398  14.914  1.00 23.86
ATOM   1122  CD  PRO   348      36.947  53.871  15.026  1.00 23.37
ATOM   1123  CA  PRO   348      35.302  52.854  13.582  1.00 24.53
ATOM   1124  CB  PRO   348      36.692  52.834  12.959  1.00 24.34
ATOM   1125  CG  PRO   348      37.338  54.030  13.588  1.00 23.28
ATOM   1126  C   PRO   348      34.759  51.449  13.786  1.00 25.57
ATOM   1127  O   PRO   348      35.290  50.696  14.606  1.00 25.45
ATOM   1128  N   PHE   349      33.677  51.118  13.084  1.00 25.89
ATOM   1129  CA  PHE   349      33.041  49.812  13.216  1.00 24.50
ATOM   1130  CB  PHE   349      31.971  49.860  14.318  1.00 23.29
ATOM   1131  CG  PHE   349      31.358  48.522  14.632  1.00 25.07
ATOM   1132  CD1 PHE   349      32.025  47.610  15.447  1.00 26.07
ATOM   1133  CD2 PHE   349      30.111  48.175  14.119  1.00 25.08
ATOM   1134  CE1 PHE   349      31.461  46.372  15.750  1.00 25.64
ATOM   1135  CE2 PHE   349      29.535  46.945  14.411  1.00 25.25
ATOM   1136  CZ  PHE   349      30.211  46.038  15.230  1.00 26.19
ATOM   1137  C   PHE   349      32.437  49.321  11.904  1.00 23.33
ATOM   1138  O   PHE   349      31.361  49.749  11.501  1.00 22.31
ATOM   1139  N   TYR   350      33.154  48.418  11.247  1.00 23.43
ATOM   1140  CA  TYR   350      32.725  47.820   9.986  1.00 23.78
ATOM   1141  CB  TYR   350      31.636  46.759  10.230  1.00 21.13
ATOM   1142  CG  TYR   350      32.133  45.531  10.967  1.00 20.42
ATOM   1143  CD1 TYR   350      32.302  45.552  12.344  1.00 19.57
ATOM   1144  CE1 TYR   350      32.794  44.440  13.028  1.00 20.40
ATOM   1145  CD2 TYR   350      32.465  44.353  10.279  1.00 21.51
ATOM   1146  CE2 TYR   350      32.963  43.224  10.958  1.00 19.67
ATOM   1147  CZ  TYR   350      33.126  43.282  12.335  1.00 20.56
ATOM   1148  OH  TYR   350      33.648  42.212  13.040  1.00 20.53
ATOM   1149  C   TYR   350      32.280  48.823   8.920  1.00 25.07
ATOM   1150  O   TYR   350      31.215  48.680   8.324  1.00 26.53
ATOM   1151  N   GLY   351      33.118  49.817   8.656  1.00 25.52
ATOM   1152  CA  GLY   351      32.789  50.802   7.644  1.00 26.67
ATOM   1153  C   GLY   351      32.054  52.000   8.205  1.00 27.75
ATOM   1154  O   GLY   351      32.097  53.088   7.624  1.00 29.56
ATOM   1155  N   LYS   352      31.332  51.788   9.300  1.00 28.35
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FIGURE 1 (cont.)

ATOM	1156	CA	LYS	352	30.596	52.858	9.962	1.00	26.46
ATOM	1157	CB	LYS	352	29.182	52.405	10.332	1.00	26.95
ATOM	1158	CG	LYS	352	28.352	51.994	9.145	1.00	28.09
ATOM	1159	CD	LYS	352	28.138	53.145	8.186	1.00	29.10
ATOM	1160	CE	LYS	352	27.767	52.615	6.811	1.00	31.84
ATOM	1161	NZ	LYS	352	26.677	51.594	6.876	1.00	34.67
ATOM	1162	C	LYS	352	31.373	53.197	11.213	1.00	25.16
ATOM	1163	O	LYS	352	32.560	52.903	11.313	1.00	24.74
ATOM	1164	N	ALA	353	30.704	53.811	12.170	1.00	26.04
ATOM	1165	CA	ALA	353	31.353	54.186	13.407	1.00	27.08
ATOM	1166	CB	ALA	353	31.987	55.568	13.267	1.00	26.55
ATOM	1167	C	ALA	353	30.332	54.172	14.533	1.00	27.81
ATOM	1168	O	ALA	353	29.122	54.285	14.297	1.00	29.07
ATOM	1169	N	ILE	354	30.816	53.977	15.750	1.00	26.83
ATOM	1170	CA	ILE	354	29.944	53.949	16.903	1.00	26.78
ATOM	1171	CB	ILE	354	30.136	52.664	17.758	1.00	26.37
ATOM	1172	CG2	ILE	354	29.224	52.705	18.989	1.00	23.34
ATOM	1173	CG1	ILE	354	29.864	51.409	16.922	1.00	26.07
ATOM	1174	CD1	ILE	354	30.151	50.093	17.660	1.00	26.73
ATOM	1175	C	ILE	354	30.269	55.147	17.770	1.00	27.53
ATOM	1176	O	ILE	354	31.446	55.480	17.980	1.00	27.83
ATOM	1177	N	PRO	355	29.231	55.890	18.172	1.00	27.07
ATOM	1178	CD	PRO	355	27.876	55.817	17.601	1.00	26.53
ATOM	1179	CA	PRO	355	29.379	57.069	19.026	1.00	27.16
ATOM	1180	CB	PRO	355	28.042	57.794	18.851	1.00	27.57
ATOM	1181	CG	PRO	355	27.507	57.257	17.531	1.00	28.35
ATOM	1182	C	PRO	355	29.521	56.570	20.463	1.00	27.80
ATOM	1183	O	PRO	355	28.665	55.825	20.951	1.00	28.66
ATOM	1184	N	LEU	356	30.602	56.955	21.133	1.00	27.31
ATOM	1185	CA	LEU	356	30.821	56.537	22.512	1.00	26.78
ATOM	1186	CB	LEU	356	32.024	57.269	23.110	1.00	27.84
ATOM	1187	CG	LEU	356	33.384	56.622	22.838	1.00	27.71
ATOM	1188	CD1	LEU	356	34.515	57.553	23.275	1.00	27.97
ATOM	1189	CD2	LEU	356	33.457	55.297	23.568	1.00	25.40
ATOM	1190	C	LEU	356	29.591	56.787	23.367	1.00	25.92
ATOM	1191	O	LEU	356	29.272	56.004	24.257	1.00	25.15
ATOM	1192	N	ALA	357	28.887	57.872	23.069	1.00	26.25
ATOM	1193	CA	ALA	357	27.685	58.241	23.813	1.00	26.44
ATOM	1194	CB	ALA	357	27.072	59.522	23.228	1.00	25.83
ATOM	1195	C	ALA	357	26.638	57.124	23.873	1.00	26.65
ATOM	1196	O	ALA	357	26.011	56.918	24.911	1.00	26.75
ATOM	1197	N	VAL	358	26.502	56.360	22.791	1.00	26.24
ATOM	1198	CA	VAL	358	25.506	55.295	22.758	1.00	26.40
ATOM	1199	CB	VAL	358	25.119	54.892	21.298	1.00	25.09
ATOM	1200	CG1	VAL	358	24.714	56.119	20.511	1.00	23.26
ATOM	1201	CG2	VAL	358	26.266	54.180	20.597	1.00	24.96
ATOM	1202	C	VAL	358	25.881	54.069	23.590	1.00	26.35
ATOM	1203	O	VAL	358	25.050	53.179	23.797	1.00	27.18
ATOM	1204	N	ILE	359	27.121	54.021	24.074	1.00	25.51
ATOM	1205	CA	ILE	359	27.567	52.892	24.893	1.00	24.89
ATOM	1206	CB	ILE	359	28.582	51.982	24.136	1.00	22.23
ATOM	1207	CG2	ILE	359	27.857	51.199	23.029	1.00	21.17
ATOM	1208	CG1	ILE	359	29.756	52.814	23.600	1.00	21.55
ATOM	1209	CD1	ILE	359	30.892	52.026	22.995	1.00	17.63
ATOM	1210	C	ILE	359	28.159	53.308	26.237	1.00	25.79
ATOM	1211	O	ILE	359	28.437	52.459	27.076	1.00	25.36
ATOM	1212	N	ALA	360	28.304	54.616	26.449	1.00	29.45
ATOM	1213	CA	ALA	360	28.879	55.171	27.681	1.00	31.32

FIGURE 1 (cont.)

ATOM	1214	CB	ALA	360	28.880	56.691	27.621	1.00	30.01
ATOM	1215	C	ALA	360	28.207	54.684	28.972	1.00	32.84
ATOM	1216	O	ALA	360	28.889	54.369	29.960	1.00	33.70
ATOM	1217	N	GLY	361	26.880	54.659	28.981	1.00	32.93
ATOM	1218	CA	GLY	361	26.172	54.179	30.154	1.00	32.53
ATOM	1219	C	GLY	361	25.285	53.020	29.739	1.00	32.16
ATOM	1220	O	GLY	361	24.892	52.945	28.579	1.00	33.01
ATOM	1221	N	GLY	362	24.978	52.115	30.664	1.00	31.44
ATOM	1222	CA	GLY	362	24.124	50.980	30.352	1.00	28.17
ATOM	1223	C	GLY	362	24.894	49.725	29.979	1.00	28.18
ATOM	1224	O	GLY	362	26.128	49.699	30.060	1.00	28.64
ATOM	1225	N	ARG	363	24.168	48.677	29.597	1.00	25.54
ATOM	1226	CA	ARG	363	24.762	47.404	29.196	1.00	25.19
ATOM	1227	CB	ARG	363	24.135	46.256	29.985	1.00	25.16
ATOM	1228	CG	ARG	363	23.726	46.631	31.401	1.00	26.44
ATOM	1229	CD	ARG	363	23.093	45.460	32.123	1.00	29.20
ATOM	1230	NE	ARG	363	24.075	44.760	32.935	1.00	34.10
ATOM	1231	CZ	ARG	363	24.655	43.608	32.616	1.00	35.13
ATOM	1232	NH1	ARG	363	24.358	42.977	31.494	1.00	34.77
ATOM	1233	NH2	ARG	363	25.613	43.130	33.389	1.00	36.31
ATOM	1234	C	ARG	363	24.504	47.226	27.695	1.00	24.94
ATOM	1235	O	ARG	363	23.377	47.393	27.222	1.00	24.76
ATOM	1236	N	HIS	364	25.542	46.910	26.934	1.00	24.18
ATOM	1237	CA	HIS	364	25.385	46.776	25.494	1.00	23.64
ATOM	1238	CB	HIS	364	25.891	48.048	24.830	1.00	23.19
ATOM	1239	CG	HIS	364	25.367	49.291	25.478	1.00	25.11
ATOM	1240	CD2	HIS	364	25.895	50.084	26.438	1.00	24.33
ATOM	1241	ND1	HIS	364	24.116	49.803	25.205	1.00	26.29
ATOM	1242	CE1	HIS	364	23.894	50.856	25.970	1.00	25.44
ATOM	1243	NE2	HIS	364	24.959	51.047	26.726	1.00	25.09
ATOM	1244	C	HIS	364	26.133	45.559	24.993	1.00	23.60
ATOM	1245	O	HIS	364	27.098	45.128	25.628	1.00	24.11
ATOM	1246	N	LEU	365	25.645	44.976	23.900	1.00	22.16
ATOM	1247	CA	LEU	365	26.247	43.784	23.310	1.00	21.25
ATOM	1248	CB	LEU	365	25.241	42.635	23.316	1.00	20.31
ATOM	1249	CG	LEU	365	25.667	41.278	22.749	1.00	19.06
ATOM	1250	CD1	LEU	365	26.952	40.821	23.413	1.00	18.55
ATOM	1251	CD2	LEU	365	24.562	40.252	22.966	1.00	16.61
ATOM	1252	C	LEU	365	26.672	44.079	21.883	1.00	21.19
ATOM	1253	O	LEU	365	25.836	44.377	21.031	1.00	21.03
ATOM	1254	N	ILE	366	27.966	43.978	21.615	1.00	20.98
ATOM	1255	CA	ILE	366	28.473	44.255	20.283	1.00	21.20
ATOM	1256	CB	ILE	366	29.646	45.254	20.322	1.00	21.57
ATOM	1257	CG2	ILE	366	30.113	45.572	18.911	1.00	19.27
ATOM	1258	CG1	ILE	366	29.225	46.536	21.051	1.00	21.36
ATOM	1259	CD1	ILE	366	30.303	47.607	21.078	1.00	20.61
ATOM	1260	C	ILE	366	28.925	42.974	19.605	1.00	21.06
ATOM	1261	O	ILE	366	29.825	42.296	20.093	1.00	20.15
ATOM	1262	N	PHE	367	28.274	42.635	18.495	1.00	20.98
ATOM	1263	CA	PHE	367	28.610	41.438	17.747	1.00	21.40
ATOM	1264	CB	PHE	367	27.364	40.804	17.125	1.00	20.48
ATOM	1265	CG	PHE	367	26.556	39.975	18.093	1.00	20.75
ATOM	1266	CD1	PHE	367	25.393	40.487	18.671	1.00	20.80
ATOM	1267	CD2	PHE	367	26.951	38.675	18.416	1.00	19.09
ATOM	1268	CE1	PHE	367	24.633	39.711	19.557	1.00	19.99
ATOM	1269	CE2	PHE	367	26.210	37.899	19.291	1.00	19.22
ATOM	1270	CZ	PHE	367	25.043	38.417	19.865	1.00	20.05
ATOM	1271	C	PHE	367	29.644	41.705	16.670	1.00	22.44

FIGURE 1 (cont.)

ATOM	1272	O	PHE	367	29.478	42.596	15.829	1.00	21.74
ATOM	1273	N	CYS	368	30.728	40.942	16.728	1.00	22.95
ATOM	1274	CA	CYS	368	31.807	41.032	15.761	1.00	23.17
ATOM	1275	CB	CYS	368	33.126	41.385	16.464	1.00	23.99
ATOM	1276	SG	CYS	368	33.120	43.017	17.283	1.00	21.99
ATOM	1277	C	CYS	368	31.863	39.650	15.106	1.00	23.06
ATOM	1278	O	CYS	368	31.433	38.658	15.699	1.00	21.98
ATOM	1279	N	HIS	369	32.358	39.578	13.877	1.00	23.71
ATOM	1280	CA	HIS	369	32.402	38.291	13.185	1.00	24.68
ATOM	1281	CB	HIS	369	32.429	38.498	11.667	1.00	24.85
ATOM	1282	CG	HIS	369	33.754	38.951	11.138	1.00	27.37
ATOM	1283	CD2	HIS	369	34.644	38.338	10.323	1.00	28.58
ATOM	1284	ND1	HIS	369	34.306	40.175	11.452	1.00	29.21
ATOM	1285	CE1	HIS	369	35.480	40.295	10.859	1.00	29.19
ATOM	1286	NE2	HIS	369	35.708	39.194	10.168	1.00	29.69
ATOM	1287	C	HIS	369	33.550	37.372	13.606	1.00	24.39
ATOM	1288	O	HIS	369	33.440	36.153	13.506	1.00	24.00
ATOM	1289	N	SER	370	34.641	37.959	14.087	1.00	24.30
ATOM	1290	CA	SER	370	35.814	37.189	14.479	1.00	24.06
ATOM	1291	CB	SER	370	36.949	37.460	13.494	1.00	24.57
ATOM	1292	OG	SER	370	37.431	38.784	13.648	1.00	26.06
ATOM	1293	C	SER	370	36.269	37.518	15.892	1.00	23.01
ATOM	1294	O	SER	370	35.936	38.574	16.433	1.00	23.58
ATOM	1295	N	LYS	371	37.076	36.633	16.461	1.00	23.64
ATOM	1296	CA	LYS	371	37.587	36.797	17.817	1.00	25.06
ATOM	1297	CB	LYS	371	38.146	35.466	18.320	1.00	24.91
ATOM	1298	CG	LYS	371	37.086	34.372	18.306	1.00	27.06
ATOM	1299	CD	LYS	371	37.648	32.979	18.078	1.00	28.04
ATOM	1300	CE	LYS	371	38.277	32.415	19.318	1.00	28.77
ATOM	1301	NZ	LYS	371	38.642	30.999	19.107	1.00	31.47
ATOM	1302	C	LYS	371	38.625	37.904	17.877	1.00	25.64
ATOM	1303	O	LYS	371	38.689	38.650	18.849	1.00	27.42
ATOM	1304	N	LYS	372	39.379	38.061	16.795	1.00	27.32
ATOM	1305	CA	LYS	372	40.402	39.100	16.707	1.00	28.80
ATOM	1306	CB	LYS	372	41.136	39.010	15.366	1.00	29.78
ATOM	1307	CG	LYS	372	42.339	39.923	15.243	1.00	30.84
ATOM	1308	CD	LYS	372	42.976	39.812	13.866	1.00	31.69
ATOM	1309	C	LYS	372	39.729	40.455	16.842	1.00	28.53
ATOM	1310	O	LYS	372	40.095	41.255	17.696	1.00	28.67
ATOM	1311	N	LYS	373	38.720	40.688	16.008	1.00	29.86
ATOM	1312	CA	LYS	373	37.966	41.935	16.040	1.00	30.80
ATOM	1313	CB	LYS	373	36.864	41.927	14.975	1.00	32.75
ATOM	1314	CG	LYS	373	37.131	42.879	13.817	1.00	38.26
ATOM	1315	CD	LYS	373	38.427	42.514	13.101	1.00	42.40
ATOM	1316	CE	LYS	373	38.993	43.676	12.295	1.00	43.70
ATOM	1317	NZ	LYS	373	40.324	43.301	11.729	1.00	45.18
ATOM	1318	C	LYS	373	37.362	42.209	17.422	1.00	30.08
ATOM	1319	O	LYS	373	37.301	43.359	17.850	1.00	31.06
ATOM	1320	N	CYS	374	36.923	41.157	18.114	1.00	28.22
ATOM	1321	CA	CYS	374	36.334	41.310	19.438	1.00	26.08
ATOM	1322	CB	CYS	374	35.800	39.970	19.964	1.00	23.42
ATOM	1323	SG	CYS	374	34.336	39.310	19.100	1.00	23.17
ATOM	1324	C	CYS	374	37.402	41.851	20.375	1.00	27.53
ATOM	1325	O	CYS	374	37.162	42.805	21.110	1.00	25.72
ATOM	1326	N	ASP	375	38.588	41.239	20.322	1.00	29.96
ATOM	1327	CA	ASP	375	39.735	41.633	21.149	1.00	31.23
ATOM	1328	CB	ASP	375	40.945	40.738	20.860	1.00	30.10
ATOM	1329	CG	ASP	375	40.737	39.312	21.296	1.00	29.63

FIGURE 1 (cont.)

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ATOM   1330  OD1 ASP   375      39.996  39.076  22.274  1.00 28.42
ATOM   1331  OD2 ASP   375      41.332  38.423  20.657  1.00 30.89
ATOM   1332  C   ASP   375      40.135  43.069  20.861  1.00 31.74
ATOM   1333  O   ASP   375      40.304  43.872  21.783  1.00 33.16
ATOM   1334  N   GLU   376      40.301  43.371  19.577  1.00 31.73
ATOM   1335  CA  GLU   376      40.686  44.701  19.127  1.00 33.34
ATOM   1336  CB  GLU   376      40.848  44.715  17.603  1.00 34.63
ATOM   1337  CG  GLU   376      41.791  43.621  17.095  1.00 38.95
ATOM   1338  CD  GLU   376      42.234  43.797  15.646  1.00 40.85
ATOM   1339  OE1 GLU   376      41.453  44.311  14.813  1.00 42.74
ATOM   1340  OE2 GLU   376      43.380  43.401  15.340  1.00 42.32
ATOM   1341  C   GLU   376      39.696  45.776  19.581  1.00 32.36
ATOM   1342  O   GLU   376      40.099  46.831  20.067  1.00 32.77
ATOM   1343  N   LEU   377      38.404  45.493  19.464  1.00 31.01
ATOM   1344  CA  LEU   377      37.398  46.456  19.871  1.00 29.80
ATOM   1345  CB  LEU   377      36.014  46.042  19.375  1.00 27.58
ATOM   1346  CG  LEU   377      34.886  47.037  19.646  1.00 25.16
ATOM   1347  CD1 LEU   377      35.306  48.433  19.220  1.00 26.04
ATOM   1348  CD2 LEU   377      33.635  46.611  18.901  1.00 24.83
ATOM   1349  C   LEU   377      37.408  46.603  21.384  1.00 31.08
ATOM   1350  O   LEU   377      37.488  47.713  21.908  1.00 32.49
ATOM   1351  N   ALA   378      37.362  45.481  22.089  1.00 31.01
ATOM   1352  CA  ALA   378      37.372  45.516  23.541  1.00 31.90
ATOM   1353  CB  ALA   378      37.518  44.102  24.109  1.00 30.31
ATOM   1354  C   ALA   378      38.532  46.398  23.990  1.00 33.00
ATOM   1355  O   ALA   378      38.350  47.303  24.800  1.00 32.23
ATOM   1356  N   ALA   379      39.703  46.171  23.399  1.00 34.63
ATOM   1357  CA  ALA   379      40.906  46.931  23.725  1.00 36.26
ATOM   1358  CB  ALA   379      42.087  46.423  22.915  1.00 36.36
ATOM   1359  C   ALA   379      40.690  48.416  23.471  1.00 37.24
ATOM   1360  O   ALA   379      40.968  49.243  24.339  1.00 38.17
ATOM   1361  N   LYS   380      40.146  48.741  22.303  1.00 38.24
ATOM   1362  CA  LYS   380      39.880  50.125  21.935  1.00 39.63
ATOM   1363  CB  LYS   380      39.184  50.196  20.565  1.00 39.82
ATOM   1364  CG  LYS   380      39.223  51.577  19.904  1.00 40.69
ATOM   1365  CD  LYS   380      38.828  51.510  18.434  1.00 40.39
ATOM   1366  CE  LYS   380      39.265  52.757  17.654  1.00 41.28
ATOM   1367  NZ  LYS   380      38.608  54.040  18.063  1.00 40.83
ATOM   1368  C   LYS   380      39.005  50.782  22.997  1.00 40.87
ATOM   1369  O   LYS   380      39.405  51.768  23.619  1.00 42.50
ATOM   1370  N   LEU   381      37.843  50.187  23.250  1.00 40.55
ATOM   1371  CA  LEU   381      36.891  50.711  24.226  1.00 40.18
ATOM   1372  CB  LEU   381      35.632  49.842  24.243  1.00 38.99
ATOM   1373  CG  LEU   381      34.870  49.610  22.940  1.00 37.56
ATOM   1374  CD1 LEU   381      33.654  48.758  23.223  1.00 35.03
ATOM   1375  CD2 LEU   381      34.464  50.938  22.331  1.00 38.01
ATOM   1376  C   LEU   381      37.458  50.801  25.642  1.00 40.57
ATOM   1377  O   LEU   381      37.302  51.822  26.323  1.00 39.48
ATOM   1378  N   VAL   382      38.096  49.721  26.083  1.00 42.00
ATOM   1379  CA  VAL   382      38.681  49.650  27.419  1.00 42.99
ATOM   1380  CB  VAL   382      39.322  48.252  27.692  1.00 42.81
ATOM   1381  CG1 VAL   382      40.811  48.255  27.390  1.00 42.57
ATOM   1382  CG2 VAL   382      39.040  47.810  29.113  1.00 40.95
ATOM   1383  C   VAL   382      39.699  50.775  27.575  1.00 44.23
ATOM   1384  O   VAL   382      39.878  51.315  28.670  1.00 45.11
ATOM   1385  N   ALA   383      40.322  51.158  26.462  1.00 44.34
ATOM   1386  CA  ALA   383      41.293  52.244  26.468  1.00 44.39
ATOM   1387  CB  ALA   383      42.115  52.238  25.181  1.00 44.85
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FIGURE 1 (cont.)

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ATOM   1388  C   ALA  383      40.556  53.574  26.626  1.00 43.71
ATOM   1389  O   ALA  383      41.035  54.481  27.312  1.00 46.22
ATOM   1390  N   LEU  384      39.378  53.679  26.018  1.00 40.83
ATOM   1391  CA  LEU  384      38.578  54.895  26.099  1.00 38.30
ATOM   1392  CB  LEU  384      37.633  54.988  24.899  1.00 39.47
ATOM   1393  CG  LEU  384      38.227  54.865  23.491  1.00 41.58
ATOM   1394  CD1 LEU  384      37.102  54.745  22.468  1.00 42.20
ATOM   1395  CD2 LEU  384      39.130  56.052  23.168  1.00 42.42
ATOM   1396  C   LEU  384      37.771  54.952  27.404  1.00 36.79
ATOM   1397  O   LEU  384      36.787  55.688  27.505  1.00 36.24
ATOM   1398  N   GLY  385      38.164  54.147  28.385  1.00 35.50
ATOM   1399  CA  GLY  385      37.475  54.145  29.664  1.00 33.80
ATOM   1400  C   GLY  385      36.171  53.364  29.713  1.00 33.33
ATOM   1401  O   GLY  385      35.474  53.391  30.728  1.00 34.28
ATOM   1402  N   ILE  386      35.825  52.668  28.633  1.00 31.60
ATOM   1403  CA  ILE  386      34.590  51.890  28.604  1.00 28.68
ATOM   1404  CB  ILE  386      34.121  51.649  27.152  1.00 27.72
ATOM   1405  CG2 ILE  386      32.933  50.698  27.124  1.00 28.20
ATOM   1406  CG1 ILE  386      33.749  52.967  26.486  1.00 25.89
ATOM   1407  CD1 ILE  386      32.566  53.650  27.126  1.00 27.25
ATOM   1408  C   ILE  386      34.810  50.535  29.282  1.00 28.13
ATOM   1409  O   ILE  386      35.838  49.890  29.061  1.00 26.54
ATOM   1410  N   ASN  387      33.844  50.098  30.092  1.00 27.35
ATOM   1411  CA  ASN  387      33.944  48.800  30.771  1.00 26.98
ATOM   1412  CB  ASN  387      33.020  48.745  31.997  1.00 26.31
ATOM   1413  CG  ASN  387      33.080  47.404  32.715  1.00 26.76
ATOM   1414  OD1 ASN  387      34.130  46.749  32.741  1.00 27.49
ATOM   1415  ND2 ASN  387      31.960  46.993  33.306  1.00 23.98
ATOM   1416  C   ASN  387      33.579  47.697  29.780  1.00 25.60
ATOM   1417  O   ASN  387      32.509  47.090  29.867  1.00 25.99
ATOM   1418  N   ALA  388      34.465  47.470  28.817  1.00 24.50
ATOM   1419  CA  ALA  388      34.241  46.474  27.780  1.00 24.38
ATOM   1420  CB  ALA  388      34.692  47.012  26.430  1.00 20.14
ATOM   1421  C   ALA  388      34.945  45.167  28.088  1.00 24.87
ATOM   1422  O   ALA  388      36.080  45.156  28.559  1.00 27.09
ATOM   1423  N   VAL  389      34.269  44.059  27.829  1.00 25.51
ATOM   1424  CA  VAL  389      34.842  42.750  28.076  1.00 25.75
ATOM   1425  CB  VAL  389      34.277  42.094  29.368  1.00 27.61
ATOM   1426  CG1 VAL  389      34.659  42.918  30.586  1.00 27.58
ATOM   1427  CG2 VAL  389      32.772  41.946  29.293  1.00 30.47
ATOM   1428  C   VAL  389      34.540  41.896  26.873  1.00 24.33
ATOM   1429  O   VAL  389      33.464  41.989  26.300  1.00 24.05
ATOM   1430  N   ALA  390      35.520  41.119  26.444  1.00 25.42
ATOM   1431  CA  ALA  390      35.345  40.253  25.285  1.00 26.04
ATOM   1432  CB  ALA  390      36.674  40.083  24.531  1.00 23.07
ATOM   1433  C   ALA  390      34.794  38.888  25.667  1.00 26.03
ATOM   1434  O   ALA  390      34.959  38.416  26.799  1.00 25.70
ATOM   1435  N   TYR  391      34.076  38.286  24.732  1.00 26.60
ATOM   1436  CA  TYR  391      33.565  36.952  24.940  1.00 26.52
ATOM   1437  CB  TYR  391      32.235  36.903  25.691  1.00 25.87
ATOM   1438  CG  TYR  391      31.857  35.459  25.965  1.00 27.47
ATOM   1439  CD1 TYR  391      32.555  34.713  26.915  1.00 28.87
ATOM   1440  CE1 TYR  391      32.306  33.360  27.087  1.00 29.43
ATOM   1441  CD2 TYR  391      30.886  34.802  25.199  1.00 27.70
ATOM   1442  CE2 TYR  391      30.630  33.446  25.368  1.00 26.82
ATOM   1443  CZ  TYR  391      31.344  32.737  26.312  1.00 28.58
ATOM   1444  OH  TYR  391      31.097  31.405  26.511  1.00 30.59
ATOM   1445  C   TYR  391      33.422  36.195  23.645  1.00 26.74
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FIGURE 1 (cont.)

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ATOM   1446  O   TYR   391      32.853  36.685  22.675  1.00 25.62
ATOM   1447  N   TYR   392      33.981  34.997  23.646  1.00 28.03
ATOM   1448  CA  TYR   392      33.906  34.095  22.522  1.00 30.93
ATOM   1449  CB  TYR   392      34.803  34.551  21.377  1.00 31.00
ATOM   1450  CG  TYR   392      36.167  35.043  21.778  1.00 30.91
ATOM   1451  CD1 TYR   392      37.158  34.157  22.202  1.00 30.94
ATOM   1452  CE1 TYR   392      38.436  34.609  22.509  1.00 29.59
ATOM   1453  CD2 TYR   392      36.492  36.394  21.678  1.00 29.43
ATOM   1454  CE2 TYR   392      37.757  36.846  21.982  1.00 29.05
ATOM   1455  CZ  TYR   392      38.720  35.949  22.396  1.00 27.90
ATOM   1456  OH  TYR   392      39.964  36.401  22.718  1.00 29.68
ATOM   1457  C   TYR   392      34.262  32.706  23.026  1.00 33.17
ATOM   1458  O   TYR   392      34.577  32.547  24.204  1.00 33.99
ATOM   1459  N   ARG   393      34.163  31.706  22.154  1.00 35.69
ATOM   1460  CA  ARG   393      34.450  30.324  22.528  1.00 36.12
ATOM   1461  CB  ARG   393      34.221  29.383  21.344  1.00 40.66
ATOM   1462  CG  ARG   393      34.624  27.931  21.595  1.00 45.96
ATOM   1463  CD  ARG   393      34.246  27.040  20.406  1.00 50.06
ATOM   1464  NE  ARG   393      32.903  26.481  20.602  1.00 53.83
ATOM   1465  CZ  ARG   393      32.668  25.370  21.300  1.00 55.97
ATOM   1466  NH1 ARG   393      31.415  24.957  21.475  1.00 57.63
ATOM   1467  NH2 ARG   393      33.682  24.619  21.738  1.00 57.66
ATOM   1468  C   ARG   393      35.862  30.178  23.071  1.00 34.84
ATOM   1469  O   ARG   393      36.833  30.615  22.448  1.00 33.70
ATOM   1470  N   GLY   394      35.946  29.572  24.253  1.00 33.32
ATOM   1471  CA  GLY   394      37.211  29.374  24.929  1.00 32.50
ATOM   1472  C   GLY   394      37.360  30.280  26.141  1.00 31.93
ATOM   1473  O   GLY   394      38.203  30.031  27.005  1.00 33.23
ATOM   1474  N   LEU   395      36.552  31.336  26.205  1.00 30.71
ATOM   1475  CA  LEU   395      36.601  32.281  27.317  1.00 29.49
ATOM   1476  CB  LEU   395      36.238  33.695  26.869  1.00 26.83
ATOM   1477  CG  LEU   395      37.160  34.324  25.830  1.00 25.83
ATOM   1478  CD1 LEU   395      37.126  35.822  26.000  1.00 25.35
ATOM   1479  CD2 LEU   395      38.586  33.824  25.988  1.00 25.20
ATOM   1480  C   LEU   395      35.712  31.868  28.470  1.00 29.64
ATOM   1481  O   LEU   395      35.046  30.833  28.415  1.00 30.33
ATOM   1482  N   ASP   396      35.700  32.691  29.510  1.00 30.84
ATOM   1483  CA  ASP   396      34.912  32.411  30.697  1.00 32.76
ATOM   1484  CB  ASP   396      35.813  32.527  31.936  1.00 33.42
ATOM   1485  CG  ASP   396      35.194  31.932  33.187  1.00 32.63
ATOM   1486  OD1 ASP   396      33.996  31.567  33.191  1.00 32.81
ATOM   1487  OD2 ASP   396      35.932  31.823  34.180  1.00 34.06
ATOM   1488  C   ASP   396      33.731  33.376  30.790  1.00 33.30
ATOM   1489  O   ASP   396      33.900  34.569  31.070  1.00 33.42
ATOM   1490  N   VAL   397      32.529  32.842  30.605  1.00 33.00
ATOM   1491  CA  VAL   397      31.327  33.658  30.650  1.00 33.17
ATOM   1492  CB  VAL   397      30.145  32.937  29.985  1.00 34.45
ATOM   1493  CG1 VAL   397      29.618  31.827  30.898  1.00 34.59
ATOM   1494  CG2 VAL   397      29.052  33.945  29.604  1.00 33.81
ATOM   1495  C   VAL   397      30.913  34.130  32.047  1.00 32.83
ATOM   1496  O   VAL   397      30.157  35.099  32.176  1.00 33.92
ATOM   1497  N   SER   398      31.419  33.478  33.089  1.00 31.28
ATOM   1498  CA  SER   398      31.060  33.865  34.445  1.00 30.65
ATOM   1499  CB  SER   398      31.390  32.741  35.424  1.00 31.52
ATOM   1500  OG  SER   398      32.755  32.370  35.345  1.00 33.10
ATOM   1501  C   SER   398      31.714  35.166  34.910  1.00 30.89
ATOM   1502  O   SER   398      31.368  35.702  35.966  1.00 31.87
ATOM   1503  N   VAL   399      32.668  35.673  34.140  1.00 30.49
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FIGURE 1 (cont.)

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ATOM   1504  CA  VAL   399      33.326  36.907  34.529  1.00 29.65
ATOM   1505  CB  VAL   399      34.793  36.976  34.008  1.00 29.94
ATOM   1506  CG1 VAL   399      35.501  35.636  34.242  1.00 29.09
ATOM   1507  CG2 VAL   399      34.841  37.372  32.552  1.00 29.84
ATOM   1508  C   VAL   399      32.512  38.122  34.076  1.00 29.51
ATOM   1509  O   VAL   399      32.753  39.245  34.530  1.00 30.22
ATOM   1510  N   ILE   400      31.534  37.889  33.202  1.00 27.63
ATOM   1511  CA  ILE   400      30.682  38.961  32.695  1.00 26.65
ATOM   1512  CB  ILE   400      29.877  38.489  31.457  1.00 26.73
ATOM   1513  CG2 ILE   400      29.017  39.627  30.912  1.00 24.30
ATOM   1514  CG1 ILE   400      30.836  37.966  30.381  1.00 27.93
ATOM   1515  CD1 ILE   400      30.161  37.431  29.132  1.00 27.24
ATOM   1516  C   ILE   400      29.717  39.357  33.808  1.00 26.54
ATOM   1517  O   ILE   400      28.987  38.521  34.320  1.00 25.84
ATOM   1518  N   PRO   401      29.720  40.637  34.213  1.00 27.05
ATOM   1519  CD  PRO   401      30.441  41.786  33.632  1.00 26.21
ATOM   1520  CA  PRO   401      28.816  41.069  35.281  1.00 27.20
ATOM   1521  CB  PRO   401      29.191  42.537  35.469  1.00 26.22
ATOM   1522  CG  PRO   401      29.597  42.959  34.085  1.00 25.90
ATOM   1523  C   PRO   401      27.339  40.903  34.906  1.00 29.40
ATOM   1524  O   PRO   401      26.945  41.134  33.773  1.00 29.57
ATOM   1525  N   THR   402      26.551  40.447  35.871  1.00 30.54
ATOM   1526  CA  THR   402      25.123  40.231  35.727  1.00 30.29
ATOM   1527  CB  THR   402      24.663  39.255  36.825  1.00 31.76
ATOM   1528  OG1 THR   402      25.063  37.929  36.462  1.00 35.36
ATOM   1529  CG2 THR   402      23.168  39.308  37.059  1.00 34.23
ATOM   1530  C   THR   402      24.373  41.557  35.835  1.00 29.90
ATOM   1531  O   THR   402      23.246  41.695  35.357  1.00 29.95
ATOM   1532  N   SER   403      24.997  42.532  36.474  1.00 29.98
ATOM   1533  CA  SER   403      24.385  43.839  36.624  1.00 30.57
ATOM   1534  CB  SER   403      23.655  43.927  37.961  1.00 30.45
ATOM   1535  OG  SER   403      24.372  43.219  38.954  1.00 34.50
ATOM   1536  C   SER   403      25.451  44.917  36.499  1.00 30.16
ATOM   1537  O   SER   403      26.650  44.628  36.581  1.00 30.53
ATOM   1538  N   GLY   404      25.008  46.146  36.265  1.00 29.14
ATOM   1539  CA  GLY   404      25.924  47.257  36.119  1.00 27.59
ATOM   1540  C   GLY   404      26.336  47.472  34.675  1.00 26.53
ATOM   1541  O   GLY   404      26.237  46.563  33.852  1.00 26.16
ATOM   1542  N   ASP   405      26.796  48.685  34.381  1.00 25.54
ATOM   1543  CA  ASP   405      27.241  49.067  33.049  1.00 23.74
ATOM   1544  CB  ASP   405      27.837  50.468  33.062  1.00 23.03
ATOM   1545  CG  ASP   405      26.838  51.530  33.392  1.00 24.18
ATOM   1546  OD1 ASP   405      25.636  51.217  33.568  1.00 22.99
ATOM   1547  OD2 ASP   405      27.277  52.698  33.480  1.00 24.90
ATOM   1548  C   ASP   405      28.324  48.156  32.543  1.00 23.67
ATOM   1549  O   ASP   405      29.292  47.873  33.259  1.00 25.75
ATOM   1550  N   VAL   406      28.211  47.774  31.279  1.00 23.25
ATOM   1551  CA  VAL   406      29.210  46.926  30.656  1.00 22.78
ATOM   1552  CB  VAL   406      29.259  45.506  31.291  1.00 23.65
ATOM   1553  CG1 VAL   406      27.978  44.730  30.983  1.00 25.24
ATOM   1554  CG2 VAL   406      30.505  44.741  30.809  1.00 23.18
ATOM   1555  C   VAL   406      28.916  46.807  29.181  1.00 21.61
ATOM   1556  O   VAL   406      27.767  46.920  28.760  1.00 23.02
ATOM   1557  N   VAL   407      29.973  46.672  28.392  1.00 20.28
ATOM   1558  CA  VAL   407      29.842  46.490  26.960  1.00 17.52
ATOM   1559  CB  VAL   407      30.487  47.639  26.159  1.00 15.18
ATOM   1560  CG1 VAL   407      30.314  47.406  24.675  1.00 11.58
ATOM   1561  CG2 VAL   407      29.852  48.966  26.549  1.00 15.21
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FIGURE 1 (cont.)

ATOM	1562	C	VAL	407	30.548	45.178	26.659	1.00	17.42
ATOM	1563	O	VAL	407	31.753	45.060	26.806	1.00	18.03
ATOM	1564	N	VAL	408	29.773	44.155	26.351	1.00	17.67
ATOM	1565	CA	VAL	408	30.340	42.868	26.025	1.00	18.23
ATOM	1566	CB	VAL	408	29.371	41.733	26.449	1.00	19.02
ATOM	1567	CG1	VAL	408	29.885	40.373	26.012	1.00	18.33
ATOM	1568	CG2	VAL	408	29.178	41.757	27.947	1.00	17.66
ATOM	1569	C	VAL	408	30.572	42.860	24.509	1.00	18.78
ATOM	1570	O	VAL	408	29.686	43.231	23.742	1.00	18.45
ATOM	1571	N	VAL	409	31.800	42.568	24.093	1.00	17.88
ATOM	1572	CA	VAL	409	32.137	42.483	22.679	1.00	17.88
ATOM	1573	CB	VAL	409	33.418	43.249	22.359	1.00	17.72
ATOM	1574	CG1	VAL	409	33.718	43.135	20.884	1.00	19.24
ATOM	1575	CG2	VAL	409	33.264	44.719	22.749	1.00	17.08
ATOM	1576	C	VAL	409	32.308	40.978	22.435	1.00	18.24
ATOM	1577	O	VAL	409	33.267	40.360	22.909	1.00	16.84
ATOM	1578	N	ALA	410	31.392	40.397	21.668	1.00	18.77
ATOM	1579	CA	ALA	410	31.400	38.958	21.473	1.00	18.14
ATOM	1580	CB	ALA	410	30.431	38.351	22.486	1.00	18.34
ATOM	1581	C	ALA	410	31.054	38.426	20.089	1.00	17.88
ATOM	1582	O	ALA	410	30.686	39.176	19.181	1.00	18.45
ATOM	1583	N	THR	411	31.194	37.109	19.950	1.00	16.99
ATOM	1584	CA	THR	411	30.827	36.404	18.738	1.00	17.24
ATOM	1585	CB	THR	411	31.821	35.299	18.361	1.00	16.51
ATOM	1586	OG1	THR	411	31.863	34.331	19.409	1.00	18.59
ATOM	1587	CG2	THR	411	33.204	35.852	18.101	1.00	18.00
ATOM	1588	C	THR	411	29.504	35.711	19.103	1.00	19.33
ATOM	1589	O	THR	411	28.972	35.889	20.204	1.00	20.25
ATOM	1590	N	ASP	412	29.016	34.851	18.221	1.00	21.45
ATOM	1591	CA	ASP	412	27.768	34.145	18.473	1.00	22.15
ATOM	1592	CB	ASP	412	27.239	33.567	17.166	1.00	19.65
ATOM	1593	CG	ASP	412	26.783	34.635	16.221	1.00	15.73
ATOM	1594	OD1	ASP	412	26.071	35.534	16.684	1.00	16.40
ATOM	1595	OD2	ASP	412	27.137	34.591	15.031	1.00	16.44
ATOM	1596	C	ASP	412	27.868	33.064	19.549	1.00	24.32
ATOM	1597	O	ASP	412	26.888	32.380	19.848	1.00	23.10
ATOM	1598	N	ALA	413	29.055	32.920	20.125	1.00	28.20
ATOM	1599	CA	ALA	413	29.284	31.937	21.168	1.00	31.95
ATOM	1600	CB	ALA	413	30.724	31.974	21.611	1.00	31.34
ATOM	1601	C	ALA	413	28.371	32.172	22.360	1.00	35.40
ATOM	1602	O	ALA	413	27.812	31.222	22.905	1.00	38.88
ATOM	1603	N	LEU	414	28.207	33.434	22.755	1.00	38.48
ATOM	1604	CA	LEU	414	27.368	33.772	23.911	1.00	40.49
ATOM	1605	CB	LEU	414	27.411	35.292	24.203	1.00	40.58
ATOM	1606	CG	LEU	414	26.880	35.779	25.570	1.00	39.61
ATOM	1607	CD1	LEU	414	27.734	35.225	26.691	1.00	39.02
ATOM	1608	CD2	LEU	414	26.855	37.290	25.652	1.00	38.26
ATOM	1609	C	LEU	414	25.923	33.298	23.721	1.00	41.04
ATOM	1610	O	LEU	414	25.586	32.246	24.309	1.00	41.21
ATOM	1611	CB	PHE	418	23.962	34.889	28.719	1.00	49.92
ATOM	1612	CG	PHE	418	24.665	35.936	29.554	1.00	49.95
ATOM	1613	CD1	PHE	418	25.107	35.639	30.844	1.00	48.64
ATOM	1614	CD2	PHE	418	24.847	37.228	29.063	1.00	49.25
ATOM	1615	CE1	PHE	418	25.716	36.613	31.632	1.00	48.52
ATOM	1616	CE2	PHE	418	25.457	38.212	29.846	1.00	49.33
ATOM	1617	CZ	PHE	418	25.890	37.905	31.131	1.00	48.87
ATOM	1618	C	PHE	418	21.732	35.511	29.710	1.00	48.72
ATOM	1619	O	PHE	418	21.041	36.066	28.842	1.00	48.37

FIGURE 1 (cont.)

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ATOM   1620  N   PHE  418      22.021  33.365  28.442  1.00 50.78
ATOM   1621  CA  PHE  418      22.670  34.351  29.353  1.00 49.76
ATOM   1622  N   THR  419      21.697  35.856  30.994  1.00 46.61
ATOM   1623  CA  THR  419      20.872  36.956  31.471  1.00 45.71
ATOM   1624  CB  THR  419      20.577  36.801  32.970  1.00 48.47
ATOM   1625  OG1 THR  419      21.767  36.364  33.654  1.00 51.07
ATOM   1626  CG2 THR  419      19.463  35.785  33.182  1.00 48.87
ATOM   1627  C   THR  419      21.628  38.257  31.213  1.00 43.14
ATOM   1628  O   THR  419      22.191  38.865  32.124  1.00 42.27
ATOM   1629  N   GLY  420      21.651  38.662  29.950  1.00 41.16
ATOM   1630  CA  GLY  420      22.362  39.862  29.568  1.00 37.36
ATOM   1631  C   GLY  420      21.732  41.160  30.017  1.00 35.27
ATOM   1632  O   GLY  420      22.436  42.091  30.376  1.00 34.05
ATOM   1633  N   ASP  421      20.407  41.238  29.972  1.00 34.00
ATOM   1634  CA  ASP  421      19.705  42.454  30.365  1.00 31.58
ATOM   1635  CB  ASP  421      19.751  42.629  31.886  1.00 33.33
ATOM   1636  CG  ASP  421      18.986  43.842  32.350  1.00 36.90
ATOM   1637  OD1 ASP  421      17.869  44.063  31.838  1.00 37.58
ATOM   1638  OD2 ASP  421      19.510  44.586  33.212  1.00 39.50
ATOM   1639  C   ASP  421      20.376  43.626  29.654  1.00 29.23
ATOM   1640  O   ASP  421      20.784  44.614  30.274  1.00 27.56
ATOM   1641  N   PHE  422      20.510  43.480  28.340  1.00 27.41
ATOM   1642  CA  PHE  422      21.148  44.485  27.495  1.00 25.64
ATOM   1643  CB  PHE  422      21.792  43.818  26.269  1.00 21.10
ATOM   1644  CG  PHE  422      22.973  42.955  26.601  1.00 17.18
ATOM   1645  CD1 PHE  422      22.951  41.595  26.328  1.00 14.50
ATOM   1646  CD2 PHE  422      24.111  43.504  27.190  1.00 15.37
ATOM   1647  CE1 PHE  422      24.049  40.787  26.638  1.00 14.66
ATOM   1648  CE2 PHE  422      25.214  42.711  27.503  1.00 14.24
ATOM   1649  CZ  PHE  422      25.185  41.353  27.229  1.00 12.70
ATOM   1650  C   PHE  422      20.236  45.626  27.044  1.00 24.93
ATOM   1651  O   PHE  422      19.110  45.409  26.605  1.00 24.73
ATOM   1652  N   ASP  423      20.740  46.846  27.167  1.00 24.37
ATOM   1653  CA  ASP  423      20.010  48.033  26.752  1.00 24.05
ATOM   1654  CB  ASP  423      20.607  49.285  27.398  1.00 24.07
ATOM   1655  CG  ASP  423      20.341  49.339  28.870  1.00 23.88
ATOM   1656  OD1 ASP  423      19.159  49.417  29.246  1.00 27.21
ATOM   1657  OD2 ASP  423      21.294  49.268  29.658  1.00 24.16
ATOM   1658  C   ASP  423      20.048  48.147  25.239  1.00 23.57
ATOM   1659  O   ASP  423      19.154  48.747  24.638  1.00 23.30
ATOM   1660  N   SER  424      21.086  47.585  24.626  1.00 21.30
ATOM   1661  CA  SER  424      21.182  47.611  23.182  1.00 20.49
ATOM   1662  CB  SER  424      21.644  48.981  22.691  1.00 21.66
ATOM   1663  OG  SER  424      23.054  49.075  22.716  1.00 22.36
ATOM   1664  C   SER  424      22.110  46.538  22.633  1.00 20.13
ATOM   1665  O   SER  424      22.919  45.950  23.369  1.00 18.98
ATOM   1666  N   VAL  425      21.940  46.272  21.339  1.00 18.97
ATOM   1667  CA  VAL  425      22.751  45.319  20.588  1.00 16.27
ATOM   1668  CB  VAL  425      21.916  44.096  20.052  1.00 15.46
ATOM   1669  CG1 VAL  425      22.703  43.332  18.999  1.00 12.48
ATOM   1670  CG2 VAL  425      21.560  43.148  21.177  1.00 11.79
ATOM   1671  C   VAL  425      23.259  46.094  19.382  1.00 15.96
ATOM   1672  O   VAL  425      22.501  46.848  18.767  1.00 15.96
ATOM   1673  N   ILE  426      24.556  46.003  19.115  1.00 15.81
ATOM   1674  CA  ILE  426      25.139  46.644  17.947  1.00 16.74
ATOM   1675  CB  ILE  426      26.251  47.640  18.304  1.00 18.60
ATOM   1676  CG2 ILE  426      26.805  48.275  17.022  1.00 18.26
ATOM   1677  CG1 ILE  426      25.697  48.710  19.254  1.00 17.67
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FIGURE 1 (cont.)

ATOM	1678	CD1	ILE	426	26.635	49.857	19.531	1.00	19.38
ATOM	1679	C	ILE	426	25.669	45.434	17.199	1.00	17.81
ATOM	1680	O	ILE	426	26.385	44.611	17.774	1.00	18.67
ATOM	1681	N	ASP	427	25.295	45.318	15.931	1.00	18.83
ATOM	1682	CA	ASP	427	25.625	44.158	15.110	1.00	18.61
ATOM	1683	CB	ASP	427	24.284	43.525	14.711	1.00	19.39
ATOM	1684	CG	ASP	427	24.405	42.146	14.094	1.00	18.80
ATOM	1685	OD1	ASP	427	25.516	41.611	13.922	1.00	17.99
ATOM	1686	OD2	ASP	427	23.337	41.592	13.774	1.00	19.23
ATOM	1687	C	ASP	427	26.417	44.516	13.870	1.00	18.42
ATOM	1688	O	ASP	427	26.077	45.479	13.185	1.00	19.02
ATOM	1689	N	CYS	428	27.454	43.728	13.570	1.00	17.93
ATOM	1690	CA	CYS	428	28.277	43.944	12.375	1.00	18.18
ATOM	1691	CB	CYS	428	29.628	43.247	12.502	1.00	18.00
ATOM	1692	SG	CYS	428	29.549	41.453	12.475	1.00	19.71
ATOM	1693	C	CYS	428	27.555	43.423	11.135	1.00	18.32
ATOM	1694	O	CYS	428	27.944	43.708	10.011	1.00	21.01
ATOM	1695	N	ASN	429	26.530	42.609	11.351	1.00	18.21
ATOM	1696	CA	ASN	429	25.713	42.055	10.272	1.00	18.70
ATOM	1697	CB	ASN	429	25.054	43.180	9.462	1.00	18.15
ATOM	1698	CG	ASN	429	24.271	44.152	10.336	1.00	18.71
ATOM	1699	OD1	ASN	429	24.504	45.356	10.294	1.00	19.89
ATOM	1700	ND2	ASN	429	23.358	43.633	11.147	1.00	17.96
ATOM	1701	C	ASN	429	26.386	41.043	9.352	1.00	18.76
ATOM	1702	O	ASN	429	25.867	40.732	8.283	1.00	18.71
ATOM	1703	N	THR	430	27.517	40.492	9.781	1.00	19.72
ATOM	1704	CA	THR	430	28.226	39.486	8.996	1.00	19.58
ATOM	1705	CB	THR	430	29.527	40.044	8.377	1.00	18.32
ATOM	1706	OG1	THR	430	30.433	40.441	9.413	1.00	18.44
ATOM	1707	CG2	THR	430	29.215	41.241	7.505	1.00	16.13
ATOM	1708	C	THR	430	28.532	38.291	9.893	1.00	20.27
ATOM	1709	O	THR	430	28.475	38.399	11.112	1.00	20.61
ATOM	1710	N	CME	431	28.829	37.144	9.300	1.00	21.71
ATOM	1711	CA	CME	431	29.118	35.958	10.088	1.00	23.49
ATOM	1712	C	CME	431	30.100	35.064	9.351	1.00	23.26
ATOM	1713	O	CME	431	30.117	35.024	8.124	1.00	24.03
ATOM	1714	CB	CME	431	27.822	35.191	10.390	1.00	24.65
ATOM	1715	SG	CME	431	26.882	34.701	8.908	1.00	28.78
ATOM	1716	2SG	CME	431	25.080	34.061	9.615	1.00	30.80
ATOM	1717	2CB	CME	431	25.261	32.249	9.685	1.00	32.16
ATOM	1718	2CA	CME	431	26.230	31.721	10.742	1.00	34.08
ATOM	1719	OG	CME	431	26.088	32.402	11.978	1.00	36.06
ATOM	1720	N	VAL	432	30.949	34.393	10.112	1.00	23.66
ATOM	1721	CA	VAL	432	31.952	33.489	9.569	1.00	25.04
ATOM	1722	CB	VAL	432	33.212	33.429	10.487	1.00	26.14
ATOM	1723	CG1	VAL	432	34.215	32.412	9.968	1.00	25.89
ATOM	1724	CG2	VAL	432	33.860	34.811	10.587	1.00	26.03
ATOM	1725	C	VAL	432	31.295	32.135	9.552	1.00	24.44
ATOM	1726	O	VAL	432	30.594	31.780	10.493	1.00	24.47
ATOM	1727	N	THR	433	31.486	31.390	8.474	1.00	25.86
ATOM	1728	CA	THR	433	30.890	30.062	8.374	1.00	26.89
ATOM	1729	CB	THR	433	29.443	30.140	7.829	1.00	26.52
ATOM	1730	OG1	THR	433	28.812	28.859	7.968	1.00	28.69
ATOM	1731	CG2	THR	433	29.438	30.564	6.362	1.00	24.41
ATOM	1732	C	THR	433	31.718	29.093	7.527	1.00	26.04
ATOM	1733	O	THR	433	32.543	29.504	6.709	1.00	24.26
ATOM	1734	N	GLN	434	31.519	27.802	7.774	1.00	27.85
ATOM	1735	CA	GLN	434	32.221	26.750	7.052	1.00	28.61

FIGURE 1 (cont.)

ATOM	1736	CB	GLN	434	32.034	25.402	7.745	1.00	31.09
ATOM	1737	CG	GLN	434	32.787	25.245	9.044	1.00	35.42
ATOM	1738	CD	GLN	434	34.249	24.893	8.853	1.00	37.94
ATOM	1739	OE1	GLN	434	34.643	23.759	9.081	1.00	44.05
ATOM	1740	NE2	GLN	434	35.057	25.853	8.428	1.00	37.21
ATOM	1741	C	GLN	434	31.701	26.657	5.628	1.00	27.68
ATOM	1742	O	GLN	434	30.494	26.673	5.387	1.00	26.87
ATOM	1743	N	THR	435	32.619	26.503	4.692	1.00	26.85
ATOM	1744	CA	THR	435	32.246	26.416	3.305	1.00	27.23
ATOM	1745	CB	THR	435	32.334	27.804	2.651	1.00	29.34
ATOM	1746	OG1	THR	435	31.794	27.751	1.323	1.00	33.86
ATOM	1747	CG2	THR	435	33.792	28.265	2.593	1.00	29.75
ATOM	1748	C	THR	435	33.184	25.433	2.609	1.00	25.74
ATOM	1749	O	THR	435	34.350	25.287	3.001	1.00	24.92
ATOM	1750	N	VAL	436	32.658	24.734	1.608	1.00	23.49
ATOM	1751	CA	VAL	436	33.447	23.774	0.858	1.00	22.57
ATOM	1752	CB	VAL	436	32.712	22.391	0.684	1.00	21.11
ATOM	1753	CG1	VAL	436	31.389	22.557	-0.029	1.00	19.30
ATOM	1754	CG2	VAL	436	33.602	21.399	-0.061	1.00	17.28
ATOM	1755	C	VAL	436	33.800	24.370	-0.493	1.00	22.79
ATOM	1756	O	VAL	436	33.029	25.129	-1.071	1.00	23.69
ATOM	1757	N	ASP	437	35.009	24.084	-0.951	1.00	23.38
ATOM	1758	CA	ASP	437	35.470	24.562	-2.237	1.00	23.03
ATOM	1759	CB	ASP	437	36.593	25.582	-2.043	1.00	25.16
ATOM	1760	CG	ASP	437	37.087	26.176	-3.358	1.00	27.57
ATOM	1761	OD1	ASP	437	36.421	26.006	-4.408	1.00	28.15
ATOM	1762	OD2	ASP	437	38.156	26.820	-3.332	1.00	30.89
ATOM	1763	C	ASP	437	35.976	23.344	-2.991	1.00	22.31
ATOM	1764	O	ASP	437	36.949	22.724	-2.581	1.00	23.36
ATOM	1765	N	PHE	438	35.257	22.948	-4.031	1.00	22.10
ATOM	1766	CA	PHE	438	35.646	21.804	-4.849	1.00	24.52
ATOM	1767	CB	PHE	438	34.444	21.329	-5.676	1.00	24.50
ATOM	1768	CG	PHE	438	33.252	20.944	-4.833	1.00	27.22
ATOM	1769	CD1	PHE	438	32.162	21.800	-4.713	1.00	27.14
ATOM	1770	CD2	PHE	438	33.242	19.739	-4.123	1.00	27.35
ATOM	1771	CE1	PHE	438	31.079	21.466	-3.897	1.00	27.93
ATOM	1772	CE2	PHE	438	32.166	19.394	-3.305	1.00	26.72
ATOM	1773	CZ	PHE	438	31.084	20.257	-3.191	1.00	28.20
ATOM	1774	C	PHE	438	36.784	22.298	-5.741	1.00	25.20
ATOM	1775	O	PHE	438	36.655	22.372	-6.964	1.00	27.05
ATOM	1776	N	SER	439	37.905	22.609	-5.094	1.00	25.29
ATOM	1777	CA	SER	439	39.087	23.167	-5.732	1.00	24.15
ATOM	1778	CB	SER	439	39.928	23.886	-4.682	1.00	24.18
ATOM	1779	OG	SER	439	39.975	23.146	-3.471	1.00	24.29
ATOM	1780	C	SER	439	39.978	22.302	-6.614	1.00	24.46
ATOM	1781	O	SER	439	40.881	22.834	-7.266	1.00	24.35
ATOM	1782	N	LEU	440	39.766	20.988	-6.615	1.00	24.35
ATOM	1783	CA	LEU	440	40.553	20.083	-7.460	1.00	26.08
ATOM	1784	CB	LEU	440	40.122	20.254	-8.923	1.00	25.16
ATOM	1785	CG	LEU	440	38.607	20.230	-9.120	1.00	26.05
ATOM	1786	CD1	LEU	440	38.242	20.519	-10.563	1.00	25.63
ATOM	1787	CD2	LEU	440	38.072	18.879	-8.673	1.00	26.91
ATOM	1788	C	LEU	440	42.069	20.314	-7.341	1.00	26.71
ATOM	1789	O	LEU	440	42.786	20.331	-8.341	1.00	28.25
ATOM	1790	N	ASP	441	42.551	20.455	-6.111	1.00	25.91
ATOM	1791	CA	ASP	441	43.966	20.705	-5.858	1.00	25.13
ATOM	1792	CB	ASP	441	44.167	22.197	-5.573	1.00	25.06
ATOM	1793	CG	ASP	441	43.347	22.691	-4.367	1.00	27.62

FIGURE 1 (cont.)

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ATOM   1794  OD1 ASP   441      42.462  21.954  -3.863  1.00 26.35
ATOM   1795  OD2 ASP   441      43.605  23.821  -3.905  1.00 26.72
ATOM   1796  C   ASP   441      44.471  19.883  -4.669  1.00 24.82
ATOM   1797  O   ASP   441      45.123  20.420  -3.781  1.00 24.32
ATOM   1798  N   PRO   442      44.328  18.548  -4.718  1.00 24.11
ATOM   1799  CD  PRO   442      44.909  17.709  -3.650  1.00 23.78
ATOM   1800  CA  PRO   442      43.750  17.712  -5.773  1.00 24.26
ATOM   1801  CB  PRO   442      44.505  16.401  -5.588  1.00 23.48
ATOM   1802  CG  PRO   442      44.562  16.289  -4.100  1.00 23.95
ATOM   1803  C   PRO   442      42.250  17.450  -5.747  1.00 24.59
ATOM   1804  O   PRO   442      41.674  17.082  -6.778  1.00 26.09
ATOM   1805  N   THR   443      41.608  17.664  -4.601  1.00 25.49
ATOM   1806  CA  THR   443      40.183  17.360  -4.465  1.00 23.89
ATOM   1807  CB  THR   443      40.014  16.138  -3.532  1.00 23.42
ATOM   1808  OG1 THR   443      40.674  16.405  -2.291  1.00 24.59
ATOM   1809  CG2 THR   443      40.643  14.905  -4.145  1.00 22.83
ATOM   1810  C   THR   443      39.269  18.502  -3.996  1.00 23.35
ATOM   1811  O   THR   443      38.669  19.197  -4.818  1.00 22.91
ATOM   1812  N   PHE   444      39.125  18.666  -2.684  1.00 22.01
ATOM   1813  CA  PHE   444      38.271  19.713  -2.141  1.00 21.72
ATOM   1814  CB  PHE   444      36.883  19.159  -1.748  1.00 20.61
ATOM   1815  CG  PHE   444      36.910  18.077  -0.693  1.00 18.78
ATOM   1816  CD1 PHE   444      36.849  18.399   0.659  1.00 19.13
ATOM   1817  CD2 PHE   444      36.954  16.731  -1.053  1.00 18.82
ATOM   1818  CE1 PHE   444      36.827  17.394   1.640  1.00 18.38
ATOM   1819  CE2 PHE   444      36.933  15.723  -0.081  1.00 16.79
ATOM   1820  CZ  PHE   444      36.869  16.052   1.261  1.00 16.58
ATOM   1821  C   PHE   444      38.931  20.432  -0.971  1.00 21.99
ATOM   1822  O   PHE   444      39.983  19.998  -0.481  1.00 22.62
ATOM   1823  N   THR   445      38.333  21.548  -0.558  1.00 22.06
ATOM   1824  CA  THR   445      38.834  22.353   0.552  1.00 22.10
ATOM   1825  CB  THR   445      39.519  23.642   0.040  1.00 22.17
ATOM   1826  OG1 THR   445      40.542  23.311  -0.903  1.00 24.33
ATOM   1827  CG2 THR   445      40.132  24.423   1.187  1.00 20.65
ATOM   1828  C   THR   445      37.682  22.795   1.452  1.00 21.98
ATOM   1829  O   THR   445      36.674  23.298   0.971  1.00 21.81
ATOM   1830  N   ILE   446      37.806  22.555   2.745  1.00 23.22
ATOM   1831  CA  ILE   446      36.789  22.998   3.684  1.00 26.55
ATOM   1832  CB  ILE   446      36.318  21.874   4.652  1.00 25.92
ATOM   1833  CG2 ILE   446      35.603  22.461   5.858  1.00 25.60
ATOM   1834  CG1 ILE   446      35.346  20.939   3.929  1.00 22.35
ATOM   1835  CD1 ILE   446      35.814  19.552   3.909  1.00 21.01
ATOM   1836  C   ILE   446      37.474  24.125   4.437  1.00 28.48
ATOM   1837  O   ILE   446      38.516  23.921   5.065  1.00 30.14
ATOM   1838  N   GLU   447      36.943  25.330   4.276  1.00 29.02
ATOM   1839  CA  GLU   447      37.494  26.509   4.916  1.00 28.87
ATOM   1840  CB  GLU   447      38.245  27.325   3.867  1.00 29.79
ATOM   1841  CG  GLU   447      37.433  27.601   2.611  1.00 31.68
ATOM   1842  CD  GLU   447      38.282  28.042   1.435  1.00 33.86
ATOM   1843  OE1 GLU   447      39.496  28.280   1.609  1.00 35.31
ATOM   1844  OE2 GLU   447      37.733  28.133   0.317  1.00 37.54
ATOM   1845  C   GLU   447      36.340  27.310   5.520  1.00 29.27
ATOM   1846  O   GLU   447      35.330  26.731   5.919  1.00 29.04
ATOM   1847  N   THR   448      36.497  28.625   5.633  1.00 28.51
ATOM   1848  CA  THR   448      35.431  29.453   6.167  1.00 29.44
ATOM   1849  CB  THR   448      35.720  29.947   7.596  1.00 29.38
ATOM   1850  OG1 THR   448      36.836  30.841   7.584  1.00 30.76
ATOM   1851  CG2 THR   448      36.019  28.797   8.514  1.00 30.09
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FIGURE 1 (cont.)

ATOM	1852	C	THR	448	35.267	30.657	5.261	1.00	29.41
ATOM	1853	O	THR	448	36.198	31.027	4.549	1.00	29.33
ATOM	1854	N	THR	449	34.059	31.213	5.228	1.00	29.92
ATOM	1855	CA	THR	449	33.773	32.390	4.421	1.00	29.42
ATOM	1856	CB	THR	449	32.943	32.047	3.174	1.00	28.46
ATOM	1857	OG1	THR	449	33.623	31.047	2.417	1.00	29.99
ATOM	1858	CG2	THR	449	32.770	33.272	2.294	1.00	28.99
ATOM	1859	C	THR	449	32.976	33.363	5.276	1.00	29.18
ATOM	1860	O	THR	449	32.068	32.953	6.006	1.00	28.97
ATOM	1861	N	THR	450	33.380	34.628	5.256	1.00	27.76
ATOM	1862	CA	THR	450	32.668	35.638	6.008	1.00	26.60
ATOM	1863	CB	THR	450	33.600	36.759	6.469	1.00	27.00
ATOM	1864	OG1	THR	450	34.613	36.202	7.324	1.00	26.73
ATOM	1865	CG2	THR	450	32.812	37.819	7.247	1.00	25.31
ATOM	1866	C	THR	450	31.578	36.145	5.076	1.00	26.94
ATOM	1867	O	THR	450	31.856	36.685	4.003	1.00	26.91
ATOM	1868	N	LEU	451	30.333	35.896	5.464	1.00	26.50
ATOM	1869	CA	LEU	451	29.184	36.267	4.661	1.00	25.37
ATOM	1870	CB	LEU	451	28.401	35.007	4.294	1.00	25.61
ATOM	1871	CG	LEU	451	29.076	33.801	3.662	1.00	26.81
ATOM	1872	CD1	LEU	451	28.101	32.649	3.739	1.00	27.81
ATOM	1873	CD2	LEU	451	29.459	34.096	2.220	1.00	26.32
ATOM	1874	C	LEU	451	28.215	37.168	5.399	1.00	24.26
ATOM	1875	O	LEU	451	28.287	37.313	6.622	1.00	23.50
ATOM	1876	N	PRO	452	27.324	37.834	4.646	1.00	22.96
ATOM	1877	CD	PRO	452	27.281	37.930	3.174	1.00	23.01
ATOM	1878	CA	PRO	452	26.328	38.707	5.252	1.00	21.34
ATOM	1879	CB	PRO	452	25.528	39.189	4.045	1.00	22.18
ATOM	1880	CG	PRO	452	26.545	39.213	2.957	1.00	23.73
ATOM	1881	C	PRO	452	25.490	37.742	6.069	1.00	20.41
ATOM	1882	O	PRO	452	25.315	36.587	5.674	1.00	20.81
ATOM	1883	N	GLN	453	24.983	38.197	7.201	1.00	19.57
ATOM	1884	CA	GLN	453	24.179	37.334	8.053	1.00	18.59
ATOM	1885	CB	GLN	453	23.888	38.047	9.364	1.00	18.03
ATOM	1886	CG	GLN	453	22.915	39.183	9.194	1.00	16.29
ATOM	1887	CD	GLN	453	22.857	40.088	10.384	1.00	17.25
ATOM	1888	OE1	GLN	453	22.521	41.259	10.244	1.00	18.98
ATOM	1889	NE2	GLN	453	23.184	39.565	11.571	1.00	12.28
ATOM	1890	C	GLN	453	22.861	37.023	7.368	1.00	19.31
ATOM	1891	O	GLN	453	22.451	37.735	6.445	1.00	19.70
ATOM	1892	N	ASP	454	22.215	35.939	7.786	1.00	19.47
ATOM	1893	CA	ASP	454	20.915	35.592	7.225	1.00	20.05
ATOM	1894	CB	ASP	454	20.831	34.095	6.866	1.00	20.04
ATOM	1895	CG	ASP	454	20.782	33.200	8.086	1.00	22.40
ATOM	1896	OD1	ASP	454	21.568	33.406	9.032	1.00	22.31
ATOM	1897	OD2	ASP	454	19.926	32.296	8.103	1.00	25.12
ATOM	1898	C	ASP	454	19.883	36.001	8.281	1.00	19.45
ATOM	1899	O	ASP	454	20.250	36.566	9.309	1.00	19.72
ATOM	1900	N	ALA	455	18.607	35.720	8.041	1.00	20.44
ATOM	1901	CA	ALA	455	17.544	36.083	8.986	1.00	20.48
ATOM	1902	CB	ALA	455	16.178	35.765	8.390	1.00	17.68
ATOM	1903	C	ALA	455	17.662	35.469	10.380	1.00	19.73
ATOM	1904	O	ALA	455	17.265	36.091	11.368	1.00	22.40
ATOM	1905	N	VAL	456	18.147	34.234	10.462	1.00	20.09
ATOM	1906	CA	VAL	456	18.295	33.564	11.754	1.00	19.00
ATOM	1907	CB	VAL	456	18.746	32.099	11.578	1.00	19.21
ATOM	1908	CG1	VAL	456	19.143	31.485	12.933	1.00	17.42
ATOM	1909	CG2	VAL	456	17.636	31.293	10.917	1.00	16.27

FIGURE 1 (cont.)

ATOM	1910	C	VAL	456	19.316	34.319	12.594	1.00	17.87
ATOM	1911	O	VAL	456	19.062	34.642	13.744	1.00	18.04
ATOM	1912	N	SER	457	20.438	34.660	11.972	1.00	19.53
ATOM	1913	CA	SER	457	21.517	35.392	12.630	1.00	19.10
ATOM	1914	CB	SER	457	22.673	35.589	11.644	1.00	17.70
ATOM	1915	OG	SER	457	23.631	36.508	12.143	1.00	20.26
ATOM	1916	C	SER	457	21.049	36.745	13.157	1.00	18.37
ATOM	1917	O	SER	457	21.246	37.063	14.324	1.00	18.88
ATOM	1918	N	ARG	458	20.402	37.519	12.292	1.00	18.67
ATOM	1919	CA	ARG	458	19.916	38.851	12.636	1.00	18.34
ATOM	1920	CB	ARG	458	19.356	39.551	11.389	1.00	15.93
ATOM	1921	CG	ARG	458	19.049	41.042	11.573	1.00	15.45
ATOM	1922	CD	ARG	458	18.892	41.721	10.220	1.00	13.63
ATOM	1923	NE	ARG	458	18.931	43.176	10.303	1.00	14.59
ATOM	1924	CZ	ARG	458	19.865	43.935	9.733	1.00	16.49
ATOM	1925	NH1	ARG	458	19.816	45.257	9.859	1.00	18.89
ATOM	1926	NH2	ARG	458	20.871	43.377	9.062	1.00	17.85
ATOM	1927	C	ARG	458	18.863	38.798	13.723	1.00	18.62
ATOM	1928	O	ARG	458	18.924	39.562	14.674	1.00	18.82
ATOM	1929	N	THR	459	17.900	37.896	13.580	1.00	20.47
ATOM	1930	CA	THR	459	16.831	37.759	14.571	1.00	22.62
ATOM	1931	CB	THR	459	15.759	36.708	14.120	1.00	23.54
ATOM	1932	OG1	THR	459	15.175	37.109	12.872	1.00	23.92
ATOM	1933	CG2	THR	459	14.655	36.566	15.168	1.00	23.27
ATOM	1934	C	THR	459	17.395	37.354	15.939	1.00	22.25
ATOM	1935	O	THR	459	16.988	37.896	16.974	1.00	22.42
ATOM	1936	N	GLN	460	18.324	36.400	15.945	1.00	21.83
ATOM	1937	CA	GLN	460	18.913	35.943	17.196	1.00	23.58
ATOM	1938	CB	GLN	460	19.575	34.574	17.022	1.00	28.20
ATOM	1939	CG	GLN	460	18.532	33.481	16.700	1.00	34.19
ATOM	1940	CD	GLN	460	19.106	32.076	16.567	1.00	38.92
ATOM	1941	OE1	GLN	460	18.389	31.140	16.174	1.00	41.47
ATOM	1942	NE2	GLN	460	20.386	31.910	16.903	1.00	41.20
ATOM	1943	C	GLN	460	19.847	36.972	17.814	1.00	21.76
ATOM	1944	O	GLN	460	19.841	37.167	19.024	1.00	22.18
ATOM	1945	N	ARG	461	20.601	37.677	16.983	1.00	20.55
ATOM	1946	CA	ARG	461	21.490	38.710	17.485	1.00	19.90
ATOM	1947	CB	ARG	461	22.460	39.178	16.398	1.00	18.96
ATOM	1948	CG	ARG	461	23.810	38.533	16.562	1.00	18.17
ATOM	1949	CD	ARG	461	24.341	37.840	15.337	1.00	20.30
ATOM	1950	NE	ARG	461	25.088	38.742	14.479	1.00	21.22
ATOM	1951	CZ	ARG	461	26.196	38.426	13.812	1.00	20.58
ATOM	1952	NH1	ARG	461	26.740	37.220	13.886	1.00	18.60
ATOM	1953	NH2	ARG	461	26.716	39.316	12.992	1.00	23.17
ATOM	1954	C	ARG	461	20.661	39.855	18.042	1.00	20.36
ATOM	1955	O	ARG	461	20.824	40.229	19.201	1.00	21.32
ATOM	1956	N	ARG	462	19.724	40.366	17.247	1.00	20.67
ATOM	1957	CA	ARG	462	18.847	41.453	17.685	1.00	20.84
ATOM	1958	CB	ARG	462	17.857	41.820	16.574	1.00	21.40
ATOM	1959	CG	ARG	462	16.931	42.969	16.941	1.00	22.08
ATOM	1960	CD	ARG	462	15.792	43.156	15.944	1.00	21.34
ATOM	1961	NE	ARG	462	14.830	42.062	16.007	1.00	21.80
ATOM	1962	CZ	ARG	462	13.742	41.978	15.247	1.00	21.21
ATOM	1963	NH1	ARG	462	12.935	40.937	15.371	1.00	22.57
ATOM	1964	NH2	ARG	462	13.459	42.929	14.367	1.00	18.74
ATOM	1965	C	ARG	462	18.056	41.018	18.926	1.00	21.55
ATOM	1966	O	ARG	462	17.801	41.822	19.833	1.00	21.69
ATOM	1967	N	GLY	463	17.711	39.731	18.965	1.00	21.00

FIGURE 1 (cont.)

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ATOM   1968  CA  GLY   463      16.950  39.173  20.064  1.00 21.40
ATOM   1969  C   GLY   463      17.594  39.194  21.434  1.00 23.27
ATOM   1970  O   GLY   463      16.951  38.847  22.420  1.00 25.42
ATOM   1971  N   ARG   464      18.856  39.586  21.522  1.00 24.33
ATOM   1972  CA  ARG   464      19.530  39.644  22.814  1.00 25.08
ATOM   1973  CB  ARG   464      21.044  39.714  22.620  1.00 25.94
ATOM   1974  CG  ARG   464      21.632  38.564  21.823  1.00 28.27
ATOM   1975  CD  ARG   464      21.511  37.237  22.554  1.00 31.16
ATOM   1976  NE  ARG   464      22.670  36.393  22.274  1.00 35.52
ATOM   1977  CZ  ARG   464      22.887  35.766  21.119  1.00 39.25
ATOM   1978  NH1 ARG   464      23.987  35.031  20.963  1.00 40.53
ATOM   1979  NH2 ARG   464      21.991  35.828  20.132  1.00 39.41
ATOM   1980  C   ARG   464      19.042  40.848  23.634  1.00 25.24
ATOM   1981  O   ARG   464      19.297  40.933  24.843  1.00 24.97
ATOM   1982  N   THR   465      18.360  41.784  22.975  1.00 25.46
ATOM   1983  CA  THR   465      17.821  42.970  23.651  1.00 25.46
ATOM   1984  CB  THR   465      18.428  44.286  23.081  1.00 22.61
ATOM   1985  OG1 THR   465      18.181  45.357  23.993  1.00 21.95
ATOM   1986  CG2 THR   465      17.831  44.644  21.731  1.00 19.47
ATOM   1987  C   THR   465      16.285  42.987  23.545  1.00 27.08
ATOM   1988  O   THR   465      15.697  42.133  22.874  1.00 27.65
ATOM   1989  N   GLY   466      15.644  43.931  24.230  1.00 28.70
ATOM   1990  CA  GLY   466      14.194  44.025  24.192  1.00 30.14
ATOM   1991  C   GLY   466      13.486  42.861  24.871  1.00 31.44
ATOM   1992  O   GLY   466      12.354  42.508  24.512  1.00 32.18
ATOM   1993  N   ARG   467      14.135  42.280  25.875  1.00 32.23
ATOM   1994  CA  ARG   467      13.578  41.143  26.600  1.00 32.05
ATOM   1995  CB  ARG   467      14.679  40.144  26.937  1.00 29.85
ATOM   1996  CG  ARG   467      15.369  39.574  25.734  1.00 28.91
ATOM   1997  CD  ARG   467      16.432  38.620  26.174  1.00 30.63
ATOM   1998  NE  ARG   467      17.122  38.018  25.044  1.00 33.36
ATOM   1999  CZ  ARG   467      17.549  36.760  25.027  1.00 35.37
ATOM   2000  NH1 ARG   467      18.173  36.275  23.959  1.00 36.51
ATOM   2001  NH2 ARG   467      17.370  35.987  26.088  1.00 36.08
ATOM   2002  C   ARG   467      12.858  41.567  27.873  1.00 33.30
ATOM   2003  O   ARG   467      13.431  41.573  28.963  1.00 34.17
ATOM   2004  N   GLY   468      11.583  41.898  27.732  1.00 34.55
ATOM   2005  CA  GLY   468      10.808  42.314  28.882  1.00 34.38
ATOM   2006  C   GLY   468      10.967  43.791  29.163  1.00 34.53
ATOM   2007  O   GLY   468      10.558  44.274  30.213  1.00 36.37
ATOM   2008  N   LYS   469      11.590  44.503  28.237  1.00 33.19
ATOM   2009  CA  LYS   469      11.787  45.932  28.379  1.00 32.67
ATOM   2010  CB  LYS   469      12.797  46.258  29.491  1.00 34.53
ATOM   2011  CG  LYS   469      14.257  45.905  29.206  1.00 35.53
ATOM   2012  CD  LYS   469      15.157  46.408  30.336  1.00 35.50
ATOM   2013  CE  LYS   469      16.634  46.384  29.961  1.00 36.18
ATOM   2014  NZ  LYS   469      17.508  46.793  31.106  1.00 33.86
ATOM   2015  C   LYS   469      12.291  46.417  27.045  1.00 31.65
ATOM   2016  O   LYS   469      12.765  45.627  26.234  1.00 32.31
ATOM   2017  N   PRO   470      12.164  47.717  26.778  1.00 30.75
ATOM   2018  CD  PRO   470      11.491  48.754  27.580  1.00 30.88
ATOM   2019  CA  PRO   470      12.626  48.255  25.500  1.00 28.89
ATOM   2020  CB  PRO   470      12.238  49.731  25.597  1.00 29.64
ATOM   2021  CG  PRO   470      11.044  49.721  26.519  1.00 30.22
ATOM   2022  C   PRO   470      14.130  48.089  25.298  1.00 27.83
ATOM   2023  O   PRO   470      14.910  48.069  26.256  1.00 28.38
ATOM   2024  N   GLY   471      14.525  47.975  24.040  1.00 25.46
ATOM   2025  CA  GLY   471      15.923  47.834  23.701  1.00 22.38
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FIGURE 1 (cont.)

ATOM	2026	C	GLY	471	16.164	48.513	22.373	1.00	20.97
ATOM	2027	O	GLY	471	15.216	48.887	21.668	1.00	20.48
ATOM	2028	N	ILE	472	17.431	48.715	22.043	1.00	20.35
ATOM	2029	CA	ILE	472	17.803	49.344	20.792	1.00	19.19
ATOM	2030	CB	ILE	472	18.500	50.710	21.018	1.00	19.31
ATOM	2031	CG2	ILE	472	18.916	51.317	19.697	1.00	19.60
ATOM	2032	CG1	ILE	472	17.534	51.680	21.706	1.00	20.42
ATOM	2033	CD1	ILE	472	18.101	53.048	21.989	1.00	20.47
ATOM	2034	C	ILE	472	18.727	48.400	20.045	1.00	20.13
ATOM	2035	O	ILE	472	19.509	47.650	20.651	1.00	18.96
ATOM	2036	N	TYR	473	18.593	48.402	18.726	1.00	20.53
ATOM	2037	CA	TYR	473	19.406	47.562	17.865	1.00	20.24
ATOM	2038	CB	TYR	473	18.527	46.504	17.184	1.00	17.07
ATOM	2039	CG	TYR	473	19.236	45.657	16.154	1.00	16.23
ATOM	2040	CD1	TYR	473	20.183	44.704	16.537	1.00	16.38
ATOM	2041	CE1	TYR	473	20.844	43.918	15.594	1.00	15.97
ATOM	2042	CD2	TYR	473	18.961	45.809	14.792	1.00	15.90
ATOM	2043	CE2	TYR	473	19.615	45.033	13.830	1.00	17.92
ATOM	2044	CZ	TYR	473	20.561	44.085	14.236	1.00	19.05
ATOM	2045	OH	TYR	473	21.232	43.322	13.292	1.00	16.03
ATOM	2046	C	TYR	473	20.054	48.481	16.839	1.00	20.38
ATOM	2047	O	TYR	473	19.372	49.235	16.156	1.00	21.81
ATOM	2048	N	ARG	474	21.377	48.486	16.795	1.00	21.07
ATOM	2049	CA	ARG	474	22.087	49.311	15.833	1.00	21.12
ATOM	2050	CB	ARG	474	23.092	50.217	16.535	1.00	22.36
ATOM	2051	CG	ARG	474	22.454	51.054	17.627	1.00	24.18
ATOM	2052	CD	ARG	474	23.444	51.980	18.304	1.00	25.34
ATOM	2053	NE	ARG	474	22.844	52.571	19.493	1.00	26.57
ATOM	2054	CZ	ARG	474	21.960	53.562	19.476	1.00	26.60
ATOM	2055	NH1	ARG	474	21.468	54.026	20.615	1.00	25.83
ATOM	2056	NH2	ARG	474	21.580	54.105	18.327	1.00	27.33
ATOM	2057	C	ARG	474	22.766	48.354	14.876	1.00	21.22
ATOM	2058	O	ARG	474	23.282	47.310	15.281	1.00	21.04
ATOM	2059	N	PHE	475	22.740	48.699	13.599	1.00	22.21
ATOM	2060	CA	PHE	475	23.306	47.849	12.575	1.00	23.28
ATOM	2061	CB	PHE	475	22.170	47.148	11.815	1.00	25.19
ATOM	2062	CG	PHE	475	21.164	48.103	11.199	1.00	26.26
ATOM	2063	CD1	PHE	475	20.079	48.570	11.941	1.00	25.75
ATOM	2064	CD2	PHE	475	21.307	48.537	9.878	1.00	26.21
ATOM	2065	CE1	PHE	475	19.156	49.452	11.374	1.00	24.75
ATOM	2066	CE2	PHE	475	20.390	49.417	9.306	1.00	24.17
ATOM	2067	CZ	PHE	475	19.314	49.873	10.060	1.00	23.51
ATOM	2068	C	PHE	475	24.151	48.638	11.598	1.00	23.82
ATOM	2069	O	PHE	475	23.960	49.843	11.428	1.00	25.90
ATOM	2070	N	VAL	476	25.082	47.946	10.955	1.00	23.60
ATOM	2071	CA	VAL	476	25.957	48.545	9.959	1.00	22.75
ATOM	2072	CB	VAL	476	27.299	47.772	9.898	1.00	23.15
ATOM	2073	CG1	VAL	476	28.178	48.292	8.773	1.00	22.36
ATOM	2074	CG2	VAL	476	28.019	47.881	11.227	1.00	23.76
ATOM	2075	C	VAL	476	25.263	48.440	8.594	1.00	21.91
ATOM	2076	O	VAL	476	25.323	49.353	7.774	1.00	22.30
ATOM	2077	N	ALA	477	24.590	47.320	8.371	1.00	21.29
ATOM	2078	CA	ALA	477	23.919	47.066	7.111	1.00	21.64
ATOM	2079	CB	ALA	477	24.658	45.974	6.328	1.00	21.38
ATOM	2080	C	ALA	477	22.454	46.696	7.301	1.00	21.13
ATOM	2081	O	ALA	477	22.091	45.962	8.218	1.00	20.40
ATOM	2082	N	PRO	478	21.598	47.195	6.403	1.00	21.02
ATOM	2083	CD	PRO	478	21.990	48.162	5.360	1.00	21.21

FIGURE 1 (cont.)

ATOM	2084	CA	PRO	478	20.152	46.976	6.400	1.00	23.06
ATOM	2085	CB	PRO	478	19.648	48.180	5.601	1.00	23.71
ATOM	2086	CG	PRO	478	20.722	48.326	4.561	1.00	23.74
ATOM	2087	C	PRO	478	19.669	45.653	5.791	1.00	21.67
ATOM	2088	O	PRO	478	18.532	45.226	6.028	1.00	21.26
ATOM	2089	N	GLY	479	20.515	45.021	4.992	1.00	19.99
ATOM	2090	CA	GLY	479	20.118	43.779	4.368	1.00	19.25
ATOM	2091	C	GLY	479	20.473	42.550	5.166	1.00	19.67
ATOM	2092	O	GLY	479	21.255	42.611	6.117	1.00	19.75
ATOM	2093	N	GLU	480	19.892	41.430	4.762	1.00	18.74
ATOM	2094	CA	GLU	480	20.135	40.145	5.395	1.00	19.62
ATOM	2095	CB	GLU	480	19.266	39.994	6.641	1.00	19.51
ATOM	2096	CG	GLU	480	17.798	39.867	6.293	1.00	20.84
ATOM	2097	CD	GLU	480	16.907	39.754	7.487	1.00	20.69
ATOM	2098	OE1	GLU	480	15.720	40.123	7.353	1.00	21.54
ATOM	2099	OE2	GLU	480	17.383	39.300	8.547	1.00	20.24
ATOM	2100	C	GLU	480	19.713	39.095	4.373	1.00	20.25
ATOM	2101	O	GLU	480	18.875	39.368	3.508	1.00	21.34
ATOM	2102	N	ARG	481	20.297	37.908	4.442	1.00	19.33
ATOM	2103	CA	ARG	481	19.916	36.858	3.515	1.00	18.50
ATOM	2104	CB	ARG	481	21.063	35.868	3.302	1.00	18.20
ATOM	2105	CG	ARG	481	22.241	36.404	2.523	1.00	15.86
ATOM	2106	CD	ARG	481	23.287	35.325	2.421	1.00	15.43
ATOM	2107	NE	ARG	481	23.964	35.096	3.694	1.00	14.91
ATOM	2108	CZ	ARG	481	23.950	33.946	4.367	1.00	15.54
ATOM	2109	NH1	ARG	481	23.279	32.903	3.897	1.00	15.94
ATOM	2110	NH2	ARG	481	24.642	33.826	5.495	1.00	11.48
ATOM	2111	C	ARG	481	18.744	36.118	4.118	1.00	19.75
ATOM	2112	O	ARG	481	18.698	35.898	5.332	1.00	19.19
ATOM	2113	N	PRO	482	17.726	35.814	3.303	1.00	21.15
ATOM	2114	CD	PRO	482	17.480	36.254	1.914	1.00	21.49
ATOM	2115	CA	PRO	482	16.577	35.081	3.848	1.00	21.68
ATOM	2116	CB	PRO	482	15.704	34.858	2.611	1.00	21.74
ATOM	2117	CG	PRO	482	15.976	36.100	1.785	1.00	22.13
ATOM	2118	C	PRO	482	17.096	33.749	4.422	1.00	21.37
ATOM	2119	O	PRO	482	18.049	33.166	3.896	1.00	21.05
ATOM	2120	N	SER	483	16.502	33.288	5.513	1.00	21.11
ATOM	2121	CA	SER	483	16.942	32.048	6.133	1.00	21.78
ATOM	2122	CB	SER	483	16.247	31.868	7.487	1.00	21.27
ATOM	2123	OG	SER	483	14.868	31.562	7.331	1.00	19.02
ATOM	2124	C	SER	483	16.591	30.860	5.251	1.00	22.57
ATOM	2125	O	SER	483	15.780	30.983	4.343	1.00	22.97
ATOM	2126	N	GLY	484	17.213	29.714	5.502	1.00	24.13
ATOM	2127	CA	GLY	484	16.835	28.539	4.747	1.00	26.14
ATOM	2128	C	GLY	484	17.833	27.793	3.904	1.00	27.18
ATOM	2129	O	GLY	484	17.500	26.727	3.387	1.00	28.70
ATOM	2130	N	MET	485	19.028	28.337	3.722	1.00	27.71
ATOM	2131	CA	MET	485	20.027	27.653	2.913	1.00	27.75
ATOM	2132	CB	MET	485	20.517	28.557	1.782	1.00	30.73
ATOM	2133	CG	MET	485	19.436	29.106	0.850	1.00	36.02
ATOM	2134	SD	MET	485	18.683	27.861	-0.207	1.00	42.25
ATOM	2135	CE	MET	485	20.139	26.751	-0.591	1.00	41.08
ATOM	2136	C	MET	485	21.221	27.259	3.759	1.00	25.81
ATOM	2137	O	MET	485	21.559	27.941	4.726	1.00	23.50
ATOM	2138	N	PHE	486	21.812	26.116	3.443	1.00	25.36
ATOM	2139	CA	PHE	486	23.018	25.693	4.138	1.00	25.36
ATOM	2140	CB	PHE	486	22.746	24.797	5.359	1.00	23.40
ATOM	2141	CG	PHE	486	22.193	23.445	5.035	1.00	24.70

FIGURE 1 (cont.)

ATOM	2142	CD1	PHE	486	23.048	22.371	4.795	1.00	25.53
ATOM	2143	CD2	PHE	486	20.822	23.226	5.034	1.00	23.72
ATOM	2144	CE1	PHE	486	22.549	21.098	4.564	1.00	25.73
ATOM	2145	CE2	PHE	486	20.311	21.959	4.804	1.00	25.05
ATOM	2146	CZ	PHE	486	21.174	20.887	4.569	1.00	25.77
ATOM	2147	C	PHE	486	24.004	25.089	3.141	1.00	24.60
ATOM	2148	O	PHE	486	23.616	24.599	2.075	1.00	22.55
ATOM	2149	N	ASP	487	25.282	25.232	3.465	1.00	25.33
ATOM	2150	CA	ASP	487	26.392	24.769	2.639	1.00	25.56
ATOM	2151	CB	ASP	487	27.674	25.435	3.150	1.00	25.82
ATOM	2152	CG	ASP	487	28.810	25.337	2.174	1.00	25.43
ATOM	2153	OD1	ASP	487	28.767	26.041	1.155	1.00	26.83
ATOM	2154	OD2	ASP	487	29.752	24.568	2.421	1.00	26.93
ATOM	2155	C	ASP	487	26.590	23.244	2.582	1.00	26.12
ATOM	2156	O	ASP	487	26.323	22.518	3.548	1.00	26.16
ATOM	2157	N	SER	488	27.134	22.781	1.462	1.00	26.57
ATOM	2158	CA	SER	488	27.421	21.365	1.244	1.00	26.60
ATOM	2159	CB	SER	488	27.972	21.165	-0.173	1.00	28.61
ATOM	2160	OG	SER	488	28.173	19.795	-0.481	1.00	31.93
ATOM	2161	C	SER	488	28.421	20.838	2.286	1.00	26.05
ATOM	2162	O	SER	488	28.447	19.639	2.583	1.00	26.13
ATOM	2163	N	SER	489	29.227	21.728	2.861	1.00	24.66
ATOM	2164	CA	SER	489	30.185	21.301	3.864	1.00	22.91
ATOM	2165	CB	SER	489	31.078	22.459	4.300	1.00	21.25
ATOM	2166	OG	SER	489	30.310	23.551	4.768	1.00	21.37
ATOM	2167	C	SER	489	29.422	20.737	5.062	1.00	23.17
ATOM	2168	O	SER	489	29.978	19.963	5.846	1.00	24.42
ATOM	2169	N	VAL	490	28.156	21.129	5.216	1.00	21.89
ATOM	2170	CA	VAL	490	27.363	20.620	6.324	1.00	21.05
ATOM	2171	CB	VAL	490	26.038	21.396	6.522	1.00	21.77
ATOM	2172	CG1	VAL	490	25.220	20.725	7.598	1.00	20.51
ATOM	2173	CG2	VAL	490	26.314	22.853	6.931	1.00	20.48
ATOM	2174	C	VAL	490	27.088	19.147	6.051	1.00	20.91
ATOM	2175	O	VAL	490	27.114	18.341	6.973	1.00	22.47
ATOM	2176	N	LEU	491	26.879	18.793	4.779	1.00	21.01
ATOM	2177	CA	LEU	491	26.636	17.397	4.390	1.00	21.10
ATOM	2178	CB	LEU	491	26.283	17.289	2.909	1.00	20.22
ATOM	2179	CG	LEU	491	25.006	18.026	2.505	1.00	22.49
ATOM	2180	CD1	LEU	491	24.743	17.853	1.014	1.00	20.45
ATOM	2181	CD2	LEU	491	23.829	17.495	3.329	1.00	21.46
ATOM	2182	C	LEU	491	27.900	16.594	4.686	1.00	20.78
ATOM	2183	O	LEU	491	27.843	15.522	5.292	1.00	22.36
ATOM	2184	N	CYS	492	29.046	17.138	4.291	1.00	19.79
ATOM	2185	CA	CYS	492	30.317	16.491	4.556	1.00	19.65
ATOM	2186	CB	CYS	492	31.468	17.390	4.092	1.00	18.82
ATOM	2187	SG	CYS	492	33.106	16.704	4.401	1.00	20.38
ATOM	2188	C	CYS	492	30.413	16.274	6.067	1.00	19.87
ATOM	2189	O	CYS	492	30.801	15.205	6.537	1.00	20.08
ATOM	2190	N	GLU	493	29.997	17.289	6.817	1.00	21.33
ATOM	2191	CA	GLU	493	30.028	17.262	8.274	1.00	22.71
ATOM	2192	CB	GLU	493	29.724	18.648	8.830	1.00	24.31
ATOM	2193	CG	GLU	493	30.165	18.820	10.269	1.00	28.02
ATOM	2194	CD	GLU	493	30.042	20.247	10.763	1.00	29.49
ATOM	2195	OE1	GLU	493	29.269	21.030	10.166	1.00	31.62
ATOM	2196	OE2	GLU	493	30.720	20.585	11.758	1.00	32.33
ATOM	2197	C	GLU	493	29.074	16.229	8.862	1.00	21.21
ATOM	2198	O	GLU	493	29.344	15.663	9.925	1.00	21.52
ATOM	2199	N	CYS	494	27.975	15.969	8.161	1.00	20.48

FIGURE 1 (cont.)

```
ATOM   2200  CA  CYS   494      27.008  14.970   8.611  1.00 20.92
ATOM   2201  CB  CYS   494      25.690  15.097   7.830  1.00 20.47
ATOM   2202  SG  CYS   494      24.630  16.512   8.329  1.00 19.52
ATOM   2203  C   CYS   494      27.616  13.565   8.471  1.00 20.64
ATOM   2204  O   CYS   494      27.548  12.750   9.404  1.00 21.39
ATOM   2205  N   TYR   495      28.240  13.296   7.324  1.00 18.97
ATOM   2206  CA  TYR   495      28.886  12.008   7.092  1.00 20.35
ATOM   2207  CB  TYR   495      29.372  11.918   5.645  1.00 19.37
ATOM   2208  CG  TYR   495      28.260  11.676   4.653  1.00 19.50
ATOM   2209  CD1 TYR   495      27.606  12.740   4.038  1.00 19.12
ATOM   2210  CE1 TYR   495      26.557  12.524   3.146  1.00 18.63
ATOM   2211  CD2 TYR   495      27.840  10.378   4.348  1.00 18.29
ATOM   2212  CE2 TYR   495      26.794  10.154   3.461  1.00 18.31
ATOM   2213  CZ  TYR   495      26.158  11.229   2.866  1.00 18.52
ATOM   2214  OH  TYR   495      25.114  11.014   1.997  1.00 22.20
ATOM   2215  C   TYR   495      30.060  11.804   8.059  1.00 20.52
ATOM   2216  O   TYR   495      30.287  10.708   8.572  1.00 20.61
ATOM   2217  N   ASP   496      30.804  12.874   8.302  1.00 21.88
ATOM   2218  CA  ASP   496      31.934  12.834   9.212  1.00 23.32
ATOM   2219  CB  ASP   496      32.631  14.204   9.212  1.00 25.74
ATOM   2220  CG  ASP   496      33.981  14.190   9.928  1.00 28.22
ATOM   2221  OD1 ASP   496      35.028  14.310   9.252  1.00 27.49
ATOM   2222  OD2 ASP   496      33.995  14.083  11.172  1.00 29.66
ATOM   2223  C   ASP   496      31.433  12.459  10.613  1.00 24.14
ATOM   2224  O   ASP   496      32.051  11.639  11.302  1.00 24.65
ATOM   2225  N   ALA   497      30.291  13.023  11.007  1.00 25.27
ATOM   2226  CA  ALA   497      29.685  12.758  12.322  1.00 25.04
ATOM   2227  CB  ALA   497      28.555  13.746  12.592  1.00 26.49
ATOM   2228  C   ALA   497      29.169  11.327  12.464  1.00 25.23
ATOM   2229  O   ALA   497      29.274  10.718  13.540  1.00 24.69
ATOM   2230  N   GLY   498      28.571  10.807  11.397  1.00 24.53
ATOM   2231  CA  GLY   498      28.077   9.443  11.433  1.00 25.39
ATOM   2232  C   GLY   498      29.231   8.490  11.695  1.00 25.40
ATOM   2233  O   GLY   498      29.164   7.619  12.567  1.00 24.85
ATOM   2234  N   CME   499      30.314   8.708  10.960  1.00 25.32
ATOM   2235  CA  CME   499      31.527   7.908  11.068  1.00 25.32
ATOM   2236  C   CME   499      32.278   8.088  12.377  1.00 23.75
ATOM   2237  O   CME   499      32.746   7.116  12.958  1.00 23.80
ATOM   2238  CB  CME   499      32.475   8.244   9.917  1.00 25.58
ATOM   2239  SG  CME   499      31.828   7.806   8.284  1.00 25.23
ATOM   2240  2SG CME   499      31.898   5.788   8.347  1.00 25.26
ATOM   2241  2CB CME   499      33.623   5.432   7.900  1.00 22.20
ATOM   2242  2CA CME   499      33.954   5.815   6.487  1.00 20.21
ATOM   2243  OG  CME   499      33.382   4.900   5.576  1.00 20.89
ATOM   2244  N   ALA   500      32.397   9.329  12.835  1.00 23.46
ATOM   2245  CA  ALA   500      33.126   9.619  14.068  1.00 23.38
ATOM   2246  CB  ALA   500      33.626  11.066  14.060  1.00 22.52
ATOM   2247  C   ALA   500      32.359   9.351  15.349  1.00 25.43
ATOM   2248  O   ALA   500      32.889   8.739  16.279  1.00 25.86
ATOM   2249  N   TRP   501      31.102   9.781  15.392  1.00 27.22
ATOM   2250  CA  TRP   501      30.303   9.623  16.601  1.00 28.60
ATOM   2251  CB  TRP   501      29.788  10.983  17.057  1.00 27.51
ATOM   2252  CG  TRP   501      30.851  11.978  17.305  1.00 25.74
ATOM   2253  CD2 TRP   501      31.598  12.149  18.510  1.00 23.93
ATOM   2254  CE2 TRP   501      32.450  13.254  18.319  1.00 24.45
ATOM   2255  CE3 TRP   501      31.631  11.477  19.732  1.00 23.70
ATOM   2256  CD1 TRP   501      31.270  12.947  16.450  1.00 25.45
ATOM   2257  NE1 TRP   501      32.230  13.725  17.052  1.00 26.50
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FIGURE 1 (cont.)

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ATOM   2258  CZ2 TRP   501      33.319  13.706  19.304  1.00 24.88
ATOM   2259  CZ3 TRP   501      32.498  11.924  20.712  1.00 24.31
ATOM   2260  CH2 TRP   501      33.331  13.028  20.493  1.00 25.27
ATOM   2261  C   TRP   501      29.116   8.675  16.639  1.00 29.45
ATOM   2262  O   TRP   501      28.799   8.155  17.708  1.00 31.24
ATOM   2263  N   TYR   502      28.452   8.442  15.512  1.00 29.45
ATOM   2264  CA  TYR   502      27.244   7.623  15.556  1.00 28.83
ATOM   2265  CB  TYR   502      26.064   8.418  14.987  1.00 26.77
ATOM   2266  CG  TYR   502      25.962   9.775  15.638  1.00 26.30
ATOM   2267  CD1 TYR   502      26.177  10.940  14.907  1.00 25.61
ATOM   2268  CE1 TYR   502      26.215  12.178  15.534  1.00 26.43
ATOM   2269  CD2 TYR   502      25.768   9.888  17.019  1.00 25.72
ATOM   2270  CE2 TYR   502      25.804  11.118  17.655  1.00 26.34
ATOM   2271  CZ  TYR   502      26.031  12.258  16.908  1.00 26.72
ATOM   2272  OH  TYR   502      26.103  13.475  17.541  1.00 29.21
ATOM   2273  C   TYR   502      27.268   6.226  15.004  1.00 29.90
ATOM   2274  O   TYR   502      26.218   5.623  14.808  1.00 30.51
ATOM   2275  N   GLU   503      28.459   5.688  14.795  1.00 30.61
ATOM   2276  CA  GLU   503      28.585   4.337  14.272  1.00 31.76
ATOM   2277  CB  GLU   503      28.115   3.320  15.300  1.00 33.16
ATOM   2278  CG  GLU   503      28.959   3.248  16.531  1.00 37.65
ATOM   2279  CD  GLU   503      28.810   1.913  17.218  1.00 42.70
ATOM   2280  OE1 GLU   503      27.654   1.459  17.415  1.00 44.39
ATOM   2281  OE2 GLU   503      29.854   1.304  17.541  1.00 46.49
ATOM   2282  C   GLU   503      27.781   4.150  13.008  1.00 30.99
ATOM   2283  O   GLU   503      27.274   3.062  12.740  1.00 32.02
ATOM   2284  N   LEU   504      27.670   5.212  12.224  1.00 31.39
ATOM   2285  CA  LEU   504      26.905   5.147  10.992  1.00 29.95
ATOM   2286  CB  LEU   504      25.963   6.351  10.864  1.00 26.33
ATOM   2287  CG  LEU   504      24.920   6.570  11.959  1.00 24.35
ATOM   2288  CD1 LEU   504      24.128   7.804  11.624  1.00 24.54
ATOM   2289  CD2 LEU   504      24.006   5.375  12.084  1.00 22.44
ATOM   2290  C   LEU   504      27.752   5.034   9.736  1.00 31.09
ATOM   2291  O   LEU   504      28.750   5.747   9.556  1.00 32.06
ATOM   2292  N   THR   505      27.323   4.116   8.883  1.00 29.82
ATOM   2293  CA  THR   505      27.918   3.847   7.590  1.00 28.87
ATOM   2294  CB  THR   505      27.336   2.520   7.067  1.00 29.51
ATOM   2295  OG1 THR   505      27.897   1.429   7.806  1.00 32.11
ATOM   2296  CG2 THR   505      27.595   2.337   5.612  1.00 31.82
ATOM   2297  C   THR   505      27.475   4.989   6.672  1.00 27.43
ATOM   2298  O   THR   505      26.390   5.542   6.857  1.00 28.06
ATOM   2299  N   PRO   506      28.302   5.367   5.680  1.00 26.19
ATOM   2300  CD  PRO   506      29.680   4.930   5.378  1.00 25.34
ATOM   2301  CA  PRO   506      27.895   6.456   4.784  1.00 24.28
ATOM   2302  CB  PRO   506      29.007   6.460   3.734  1.00 24.62
ATOM   2303  CG  PRO   506      30.212   6.083   4.533  1.00 23.11
ATOM   2304  C   PRO   506      26.529   6.153   4.165  1.00 24.09
ATOM   2305  O   PRO   506      25.705   7.046   3.990  1.00 22.93
ATOM   2306  N   ALA   507      26.291   4.880   3.855  1.00 24.47
ATOM   2307  CA  ALA   507      25.018   4.448   3.283  1.00 23.40
ATOM   2308  CB  ALA   507      25.079   2.968   2.912  1.00 22.03
ATOM   2309  C   ALA   507      23.871   4.715   4.269  1.00 23.01
ATOM   2310  O   ALA   507      22.786   5.133   3.866  1.00 22.45
ATOM   2311  N   GLU   508      24.123   4.488   5.555  1.00 22.85
ATOM   2312  CA  GLU   508      23.125   4.724   6.596  1.00 25.62
ATOM   2313  CB  GLU   508      23.593   4.149   7.936  1.00 26.13
ATOM   2314  CG  GLU   508      23.710   2.638   7.941  1.00 30.10
ATOM   2315  CD  GLU   508      24.322   2.069   9.217  1.00 32.11
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FIGURE 1 (cont.)

ATOM	2316	OE1	GLU	508	24.722	2.840	10.110	1.00	34.14
ATOM	2317	OE2	GLU	508	24.406	0.828	9.323	1.00	35.16
ATOM	2318	C	GLU	508	22.849	6.222	6.743	1.00	26.03
ATOM	2319	O	GLU	508	21.694	6.635	6.843	1.00	26.78
ATOM	2320	N	THR	509	23.912	7.025	6.773	1.00	25.74
ATOM	2321	CA	THR	509	23.785	8.474	6.882	1.00	24.39
ATOM	2322	CB	THR	509	25.168	9.148	6.907	1.00	23.11
ATOM	2323	OG1	THR	509	25.853	8.790	8.113	1.00	20.57
ATOM	2324	CG2	THR	509	25.035	10.659	6.828	1.00	22.40
ATOM	2325	C	THR	509	22.973	9.000	5.692	1.00	25.46
ATOM	2326	O	THR	509	22.129	9.886	5.853	1.00	27.07
ATOM	2327	N	THR	510	23.193	8.421	4.513	1.00	24.22
ATOM	2328	CA	THR	510	22.471	8.825	3.314	1.00	23.80
ATOM	2329	CB	THR	510	22.992	8.074	2.087	1.00	23.34
ATOM	2330	OG1	THR	510	24.355	8.443	1.855	1.00	26.59
ATOM	2331	CG2	THR	510	22.193	8.429	0.870	1.00	22.93
ATOM	2332	C	THR	510	20.961	8.624	3.457	1.00	23.48
ATOM	2333	O	THR	510	20.174	9.456	3.013	1.00	23.82
ATOM	2334	N	VAL	511	20.565	7.529	4.098	1.00	24.04
ATOM	2335	CA	VAL	511	19.157	7.216	4.321	1.00	23.83
ATOM	2336	CB	VAL	511	19.019	5.872	5.072	1.00	25.13
ATOM	2337	CG1	VAL	511	17.577	5.644	5.509	1.00	24.67
ATOM	2338	CG2	VAL	511	19.480	4.729	4.168	1.00	24.94
ATOM	2339	C	VAL	511	18.482	8.329	5.122	1.00	22.86
ATOM	2340	O	VAL	511	17.391	8.783	4.783	1.00	23.35
ATOM	2341	N	ARG	512	19.160	8.779	6.168	1.00	22.63
ATOM	2342	CA	ARG	512	18.663	9.843	7.028	1.00	22.06
ATOM	2343	CB	ARG	512	19.465	9.846	8.325	1.00	20.58
ATOM	2344	CG	ARG	512	19.312	8.538	9.080	1.00	21.48
ATOM	2345	CD	ARG	512	20.435	8.307	10.076	1.00	22.08
ATOM	2346	NE	ARG	512	20.375	6.949	10.602	1.00	22.43
ATOM	2347	CZ	ARG	512	20.475	6.631	11.889	1.00	24.44
ATOM	2348	NH1	ARG	512	20.401	5.361	12.262	1.00	24.03
ATOM	2349	NH2	ARG	512	20.666	7.574	12.804	1.00	26.08
ATOM	2350	C	ARG	512	18.693	11.222	6.348	1.00	22.38
ATOM	2351	O	ARG	512	17.727	11.990	6.424	1.00	20.41
ATOM	2352	N	LEU	513	19.788	11.524	5.657	1.00	23.97
ATOM	2353	CA	LEU	513	19.907	12.802	4.970	1.00	23.82
ATOM	2354	CB	LEU	513	21.351	13.042	4.511	1.00	23.01
ATOM	2355	CG	LEU	513	22.412	13.142	5.619	1.00	22.43
ATOM	2356	CD1	LEU	513	23.758	13.482	5.030	1.00	20.55
ATOM	2357	CD2	LEU	513	22.027	14.191	6.637	1.00	21.42
ATOM	2358	C	LEU	513	18.923	12.860	3.800	1.00	23.93
ATOM	2359	O	LEU	513	18.388	13.917	3.481	1.00	26.02
ATOM	2360	N	ARG	514	18.641	11.714	3.196	1.00	23.65
ATOM	2361	CA	ARG	514	17.697	11.653	2.086	1.00	23.31
ATOM	2362	CB	ARG	514	17.726	10.259	1.461	1.00	24.64
ATOM	2363	CG	ARG	514	16.779	10.063	0.294	1.00	27.95
ATOM	2364	CD	ARG	514	17.055	11.033	-0.848	1.00	31.79
ATOM	2365	NE	ARG	514	18.388	10.876	-1.430	1.00	34.83
ATOM	2366	CZ	ARG	514	19.048	11.847	-2.057	1.00	35.11
ATOM	2367	NH1	ARG	514	20.251	11.608	-2.561	1.00	36.73
ATOM	2368	NH2	ARG	514	18.523	13.067	-2.154	1.00	34.98
ATOM	2369	C	ARG	514	16.289	11.997	2.595	1.00	23.18
ATOM	2370	O	ARG	514	15.598	12.822	2.010	1.00	23.43
ATOM	2371	N	ALA	515	15.892	11.396	3.714	1.00	22.98
ATOM	2372	CA	ALA	515	14.585	11.648	4.319	1.00	23.14
ATOM	2373	CB	ALA	515	14.434	10.836	5.587	1.00	22.55

FIGURE 1 (cont.)

ATOM	2374	C	ALA	515	14.430	13.135	4.630	1.00	23.92
ATOM	2375	O	ALA	515	13.382	13.721	4.379	1.00	23.30
ATOM	2376	N	TYR	516	15.483	13.734	5.181	1.00	24.72
ATOM	2377	CA	TYR	516	15.493	15.157	5.505	1.00	24.73
ATOM	2378	CB	TYR	516	16.860	15.537	6.077	1.00	20.83
ATOM	2379	CG	TYR	516	16.997	16.989	6.481	1.00	21.19
ATOM	2380	CD1	TYR	516	16.811	17.385	7.805	1.00	19.78
ATOM	2381	CE1	TYR	516	16.966	18.717	8.189	1.00	18.78
ATOM	2382	CD2	TYR	516	17.340	17.971	5.545	1.00	20.90
ATOM	2383	CE2	TYR	516	17.493	19.308	5.924	1.00	20.29
ATOM	2384	CZ	TYR	516	17.305	19.662	7.246	1.00	18.46
ATOM	2385	OH	TYR	516	17.473	20.960	7.626	1.00	21.53
ATOM	2386	C	TYR	516	15.213	15.963	4.226	1.00	26.41
ATOM	2387	O	TYR	516	14.390	16.883	4.218	1.00	26.36
ATOM	2388	N	MET	517	15.893	15.594	3.146	1.00	27.82
ATOM	2389	CA	MET	517	15.736	16.268	1.868	1.00	29.62
ATOM	2390	CB	MET	517	16.897	15.910	0.929	1.00	32.52
ATOM	2391	CG	MET	517	18.257	16.449	1.415	1.00	36.99
ATOM	2392	SD	MET	517	19.641	16.357	0.240	1.00	42.11
ATOM	2393	CE	MET	517	19.692	18.060	-0.335	1.00	41.79
ATOM	2394	C	MET	517	14.394	15.971	1.215	1.00	30.17
ATOM	2395	O	MET	517	13.863	16.793	0.484	1.00	31.65
ATOM	2396	N	ASN	518	13.824	14.813	1.507	1.00	30.49
ATOM	2397	CA	ASN	518	12.543	14.455	0.926	1.00	31.49
ATOM	2398	CB	ASN	518	12.338	12.941	0.965	1.00	33.77
ATOM	2399	CG	ASN	518	12.983	12.236	-0.210	1.00	35.89
ATOM	2400	OD1	ASN	518	13.269	12.852	-1.245	1.00	36.28
ATOM	2401	ND2	ASN	518	13.204	10.929	-0.065	1.00	35.87
ATOM	2402	C	ASN	518	11.359	15.146	1.585	1.00	32.06
ATOM	2403	O	ASN	518	10.242	15.100	1.059	1.00	33.11
ATOM	2404	N	THR	519	11.568	15.770	2.740	1.00	31.41
ATOM	2405	CA	THR	519	10.453	16.441	3.389	1.00	29.95
ATOM	2406	CB	THR	519	10.353	16.087	4.881	1.00	30.80
ATOM	2407	OG1	THR	519	11.403	16.723	5.606	1.00	36.48
ATOM	2408	CG2	THR	519	10.477	14.588	5.069	1.00	32.01
ATOM	2409	C	THR	519	10.435	17.955	3.166	1.00	28.51
ATOM	2410	O	THR	519	11.380	18.678	3.509	1.00	27.20
ATOM	2411	N	PRO	520	9.361	18.447	2.528	1.00	27.84
ATOM	2412	CD	PRO	520	8.275	17.657	1.919	1.00	27.48
ATOM	2413	CA	PRO	520	9.185	19.869	2.236	1.00	25.32
ATOM	2414	CB	PRO	520	7.850	19.891	1.491	1.00	25.57
ATOM	2415	CG	PRO	520	7.812	18.568	0.806	1.00	25.28
ATOM	2416	C	PRO	520	9.117	20.740	3.482	1.00	24.11
ATOM	2417	O	PRO	520	8.695	20.294	4.544	1.00	24.19
ATOM	2418	N	GLY	521	9.553	21.985	3.341	1.00	23.43
ATOM	2419	CA	GLY	521	9.491	22.931	4.437	1.00	23.18
ATOM	2420	C	GLY	521	10.708	23.045	5.313	1.00	23.53
ATOM	2421	O	GLY	521	10.690	23.813	6.279	1.00	23.92
ATOM	2422	N	LEU	522	11.744	22.267	5.010	1.00	23.75
ATOM	2423	CA	LEU	522	12.985	22.293	5.783	1.00	21.75
ATOM	2424	CB	LEU	522	13.448	20.860	6.099	1.00	20.22
ATOM	2425	CG	LEU	522	12.696	20.053	7.166	1.00	19.37
ATOM	2426	CD1	LEU	522	13.320	18.681	7.255	1.00	18.45
ATOM	2427	CD2	LEU	522	12.754	20.739	8.521	1.00	17.70
ATOM	2428	C	LEU	522	14.076	23.051	5.029	1.00	19.66
ATOM	2429	O	LEU	522	13.898	23.398	3.867	1.00	19.67
ATOM	2430	N	PRO	523	15.157	23.439	5.725	1.00	18.95
ATOM	2431	CD	PRO	523	15.328	23.445	7.187	1.00	16.62

FIGURE 1 (cont.)

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ATOM   2432  CA  PRO   523      16.255  24.159   5.073  1.00 20.39
ATOM   2433  CB  PRO   523      17.270  24.305   6.208  1.00 19.00
ATOM   2434  CG  PRO   523      16.387  24.512   7.380  1.00 19.06
ATOM   2435  C   PRO   523      16.814  23.317   3.912  1.00 22.86
ATOM   2436  O   PRO   523      16.822  22.083   3.981  1.00 23.38
ATOM   2437  N   VAL   524      17.302  23.973   2.862  1.00 25.30
ATOM   2438  CA  VAL   524      17.819  23.250   1.707  1.00 27.02
ATOM   2439  CB  VAL   524      16.986  23.556   0.438  1.00 27.40
ATOM   2440  CG1 VAL   524      15.537  23.193   0.671  1.00 26.10
ATOM   2441  CG2 VAL   524      17.098  25.016   0.066  1.00 29.26
ATOM   2442  C   VAL   524      19.302  23.426   1.391  1.00 27.30
ATOM   2443  O   VAL   524      19.912  24.461   1.674  1.00 27.05
ATOM   2444  N   CYS   525      19.866  22.377   0.809  1.00 28.81
ATOM   2445  CA  CYS   525      21.260  22.331   0.397  1.00 30.97
ATOM   2446  CB  CYS   525      22.095  21.541   1.401  1.00 32.28
ATOM   2447  SG  CYS   525      21.430  19.886   1.803  1.00 38.03
ATOM   2448  C   CYS   525      21.285  21.617  -0.948  1.00 31.93
ATOM   2449  O   CYS   525      20.280  21.019  -1.365  1.00 31.91
ATOM   2450  N   GLN   526      22.416  21.699  -1.639  1.00 32.52
ATOM   2451  CA  GLN   526      22.557  21.053  -2.932  1.00 33.47
ATOM   2452  CB  GLN   526      23.831  21.525  -3.622  1.00 36.06
ATOM   2453  CG  GLN   526      23.797  22.989  -4.028  1.00 39.05
ATOM   2454  CD  GLN   526      25.143  23.497  -4.519  1.00 43.09
ATOM   2455  OE1 GLN   526      26.181  22.863  -4.302  1.00 44.20
ATOM   2456  NE2 GLN   526      25.134  24.648  -5.181  1.00 45.25
ATOM   2457  C   GLN   526      22.588  19.553  -2.709  1.00 32.95
ATOM   2458  O   GLN   526      23.203  19.070  -1.757  1.00 33.73
ATOM   2459  N   ASP   527      21.915  18.816  -3.580  1.00 32.09
ATOM   2460  CA  ASP   527      21.857  17.372  -3.459  1.00 31.50
ATOM   2461  CB  ASP   527      20.800  16.819  -4.421  1.00 33.07
ATOM   2462  CG  ASP   527      20.444  15.364  -4.145  1.00 34.64
ATOM   2463  OD1 ASP   527      19.441  14.898  -4.729  1.00 37.28
ATOM   2464  OD2 ASP   527      21.152  14.684  -3.363  1.00 36.58
ATOM   2465  C   ASP   527      23.220  16.747  -3.740  1.00 30.96
ATOM   2466  O   ASP   527      23.507  16.370  -4.877  1.00 30.98
ATOM   2467  N   HIS   528      24.070  16.673  -2.716  1.00 29.78
ATOM   2468  CA  HIS   528      25.408  16.079  -2.856  1.00 28.64
ATOM   2469  CB  HIS   528      26.500  17.060  -2.445  1.00 26.18
ATOM   2470  CG  HIS   528      26.610  18.248  -3.333  1.00 23.97
ATOM   2471  CD2 HIS   528      25.951  18.579  -4.468  1.00 23.60
ATOM   2472  ND1 HIS   528      27.483  19.281  -3.077  1.00 23.80
ATOM   2473  CE1 HIS   528      27.357  20.202  -4.015  1.00 24.23
ATOM   2474  NE2 HIS   528      26.433  19.801  -4.870  1.00 25.47
ATOM   2475  C   HIS   528      25.556  14.840  -1.997  1.00 28.65
ATOM   2476  O   HIS   528      26.657  14.516  -1.557  1.00 28.39
ATOM   2477  N   LEU   529      24.453  14.137  -1.776  1.00 29.34
ATOM   2478  CA  LEU   529      24.478  12.947  -0.942  1.00 29.62
ATOM   2479  CB  LEU   529      23.047  12.479  -0.645  1.00 29.60
ATOM   2480  CG  LEU   529      22.188  13.506   0.109  1.00 27.75
ATOM   2481  CD1 LEU   529      20.849  12.898   0.483  1.00 26.93
ATOM   2482  CD2 LEU   529      22.917  13.973   1.356  1.00 24.19
ATOM   2483  C   LEU   529      25.326  11.827  -1.540  1.00 29.38
ATOM   2484  O   LEU   529      26.158  11.237  -0.847  1.00 28.82
ATOM   2485  N   ALA   530      25.140  11.564  -2.830  1.00 29.06
ATOM   2486  CA  ALA   530      25.904  10.519  -3.508  1.00 29.34
ATOM   2487  CB  ALA   530      25.415  10.343  -4.951  1.00 29.19
ATOM   2488  C   ALA   530      27.394  10.856  -3.489  1.00 28.63
ATOM   2489  O   ALA   530      28.236   9.991  -3.217  1.00 29.57
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FIGURE 1 (cont.)

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ATOM   2490  N   PHE   531      27.709  12.125  -3.731  1.00 26.99
ATOM   2491  CA  PHE   531      29.094  12.553  -3.735  1.00 25.83
ATOM   2492  CB  PHE   531      29.232  14.024  -4.124  1.00 25.62
ATOM   2493  CG  PHE   531      30.621  14.553  -3.938  1.00 26.14
ATOM   2494  CD1 PHE   531      31.652  14.139  -4.778  1.00 26.59
ATOM   2495  CD2 PHE   531      30.918  15.398  -2.883  1.00 25.50
ATOM   2496  CE1 PHE   531      32.962  14.556  -4.564  1.00 25.76
ATOM   2497  CE2 PHE   531      32.222  15.820  -2.659  1.00 27.06
ATOM   2498  CZ  PHE   531      33.249  15.396  -3.502  1.00 26.12
ATOM   2499  C   PHE   531      29.769  12.325  -2.395  1.00 24.62
ATOM   2500  O   PHE   531      30.763  11.617  -2.328  1.00 26.66
ATOM   2501  N   TRP   532      29.222  12.900  -1.327  1.00 22.70
ATOM   2502  CA  TRP   532      29.824  12.758  -0.002  1.00 21.65
ATOM   2503  CB  TRP   532      29.145  13.682   1.006  1.00 20.94
ATOM   2504  CG  TRP   532      29.451  15.121   0.742  1.00 20.29
ATOM   2505  CD2 TRP   532      30.739  15.758   0.824  1.00 21.51
ATOM   2506  CE2 TRP   532      30.557  17.112   0.462  1.00 21.80
ATOM   2507  CE3 TRP   532      32.027  15.315   1.162  1.00 20.31
ATOM   2508  CD1 TRP   532      28.573  16.082   0.351  1.00 20.68
ATOM   2509  NE1 TRP   532      29.228  17.281   0.180  1.00 21.58
ATOM   2510  CZ2 TRP   532      31.618  18.037   0.428  1.00 21.77
ATOM   2511  CZ3 TRP   532      33.080  16.230   1.130  1.00 22.10
ATOM   2512  CH2 TRP   532      32.866  17.579   0.763  1.00 21.20
ATOM   2513  C   TRP   532      29.865  11.328   0.496  1.00 21.68
ATOM   2514  O   TRP   532      30.800  10.925   1.206  1.00 20.01
ATOM   2515  N   GLU   533      28.848  10.561   0.122  1.00 22.69
ATOM   2516  CA  GLU   533      28.787   9.159   0.488  1.00 23.84
ATOM   2517  CB  GLU   533      27.455   8.553   0.058  1.00 26.03
ATOM   2518  CG  GLU   533      27.279   7.129   0.543  1.00 26.87
ATOM   2519  CD  GLU   533      26.055   6.468  -0.018  1.00 27.26
ATOM   2520  OE1 GLU   533      25.058   7.165  -0.302  1.00 26.87
ATOM   2521  OE2 GLU   533      26.103   5.238  -0.185  1.00 30.58
ATOM   2522  C   GLU   533      29.926   8.450  -0.245  1.00 23.94
ATOM   2523  O   GLU   533      30.584   7.569   0.319  1.00 24.95
ATOM   2524  N   GLY   534      30.149   8.832  -1.502  1.00 23.38
ATOM   2525  CA  GLY   534      31.227   8.236  -2.277  1.00 23.87
ATOM   2526  C   GLY   534      32.555   8.469  -1.569  1.00 23.44
ATOM   2527  O   GLY   534      33.263   7.517  -1.214  1.00 22.74
ATOM   2528  N   VAL   535      32.829   9.739  -1.269  1.00 22.38
ATOM   2529  CA  VAL   535      34.050  10.147  -0.584  1.00 22.30
ATOM   2530  CB  VAL   535      34.037  11.674  -0.254  1.00 21.82
ATOM   2531  CG1 VAL   535      35.184  12.033   0.702  1.00 17.86
ATOM   2532  CG2 VAL   535      34.124  12.491  -1.541  1.00 17.05
ATOM   2533  C   VAL   535      34.312   9.351   0.696  1.00 22.60
ATOM   2534  O   VAL   535      35.324   8.655   0.799  1.00 23.81
ATOM   2535  N   PHE   536      33.381   9.411   1.645  1.00 22.80
ATOM   2536  CA  PHE   536      33.548   8.710   2.916  1.00 21.82
ATOM   2537  CB  PHE   536      32.496   9.169   3.931  1.00 21.01
ATOM   2538  CG  PHE   536      32.793  10.514   4.529  1.00 18.99
ATOM   2539  CD1 PHE   536      32.371  11.677   3.901  1.00 15.68
ATOM   2540  CD2 PHE   536      33.555  10.616   5.687  1.00 16.90
ATOM   2541  CE1 PHE   536      32.708  12.921   4.410  1.00 16.35
ATOM   2542  CE2 PHE   536      33.893  11.861   6.204  1.00 17.77
ATOM   2543  CZ  PHE   536      33.469  13.019   5.561  1.00 14.57
ATOM   2544  C   PHE   536      33.598   7.192   2.817  1.00 23.73
ATOM   2545  O   PHE   536      34.253   6.535   3.632  1.00 22.08
ATOM   2546  N   THR   537      32.941   6.633   1.805  1.00 26.19
ATOM   2547  CA  THR   537      32.952   5.189   1.619  1.00 28.54
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FIGURE 1 (cont.)

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ATOM   2548  CB  THR   537      31.998   4.771   0.490  1.00 29.40
ATOM   2549  OG1 THR   537      30.649   5.019   0.905  1.00 31.40
ATOM   2550  CG2 THR   537      32.148   3.287   0.174  1.00 29.35
ATOM   2551  C   THR   537      34.380   4.686   1.342  1.00 29.80
ATOM   2552  O   THR   537      34.741   3.566   1.722  1.00 30.70
ATOM   2553  N   GLY   538      35.201   5.537   0.733  1.00 29.84
ATOM   2554  CA  GLY   538      36.567   5.151   0.437  1.00 28.99
ATOM   2555  C   GLY   538      37.549   5.377   1.573  1.00 28.25
ATOM   2556  O   GLY   538      38.678   4.892   1.523  1.00 28.81
ATOM   2557  N   LEU   539      37.132   6.094   2.606  1.00 27.46
ATOM   2558  CA  LEU   539      38.020   6.375   3.720  1.00 27.32
ATOM   2559  CB  LEU   539      37.655   7.707   4.378  1.00 26.09
ATOM   2560  CG  LEU   539      37.583   8.951   3.481  1.00 24.55
ATOM   2561  CD1 LEU   539      37.394  10.159   4.367  1.00 23.67
ATOM   2562  CD2 LEU   539      38.843   9.108   2.645  1.00 24.83
ATOM   2563  C   LEU   539      37.963   5.248   4.725  1.00 28.87
ATOM   2564  O   LEU   539      37.689   5.458   5.909  1.00 30.15
ATOM   2565  N   THR   540      38.259   4.047   4.250  1.00 29.75
ATOM   2566  CA  THR   540      38.224   2.872   5.098  1.00 30.28
ATOM   2567  CB  THR   540      37.875   1.625   4.277  1.00 30.11
ATOM   2568  OG1 THR   540      38.931   1.351   3.352  1.00 30.87
ATOM   2569  CG2 THR   540      36.591   1.858   3.492  1.00 31.21
ATOM   2570  C   THR   540      39.533   2.652   5.857  1.00 30.76
ATOM   2571  O   THR   540      40.573   3.203   5.509  1.00 30.52
ATOM   2572  N   HIS   541      39.452   1.859   6.921  1.00 31.78
ATOM   2573  CA  HIS   541      40.603   1.524   7.757  1.00 31.88
ATOM   2574  CB  HIS   541      41.605   0.652   6.969  1.00 31.23
ATOM   2575  C   HIS   541      41.295   2.741   8.365  1.00 30.69
ATOM   2576  O   HIS   541      42.461   2.992   8.097  1.00 33.64
ATOM   2577  N   ILE   542      40.581   3.483   9.202  1.00 29.88
ATOM   2578  CA  ILE   542      41.149   4.661   9.852  1.00 29.84
ATOM   2579  CB  ILE   542      40.032   5.650  10.323  1.00 28.82
ATOM   2580  CG2 ILE   542      39.306   5.107  11.560  1.00 27.39
ATOM   2581  CG1 ILE   542      40.622   7.021  10.661  1.00 26.39
ATOM   2582  CD1 ILE   542      39.573   8.090  10.915  1.00 22.88
ATOM   2583  C   ILE   542      41.912   4.172  11.068  1.00 31.23
ATOM   2584  O   ILE   542      41.687   3.052  11.523  1.00 32.59
ATOM   2585  N   ASP   543      42.833   4.978  11.583  1.00 32.70
ATOM   2586  CA  ASP   543      43.558   4.580  12.778  1.00 33.07
ATOM   2587  CB  ASP   543      44.882   5.326  12.906  1.00 32.63
ATOM   2588  CG  ASP   543      45.667   4.909  14.136  1.00 34.41
ATOM   2589  OD1 ASP   543      46.261   3.815  14.106  1.00 37.12
ATOM   2590  OD2 ASP   543      45.698   5.666  15.135  1.00 35.50
ATOM   2591  C   ASP   543      42.636   4.978  13.914  1.00 34.38
ATOM   2592  O   ASP   543      42.306   6.160  14.067  1.00 34.89
ATOM   2593  N   ALA   544      42.206   3.997  14.702  1.00 34.33
ATOM   2594  CA  ALA   544      41.307   4.260  15.820  1.00 34.13
ATOM   2595  CB  ALA   544      40.876   2.956  16.460  1.00 34.20
ATOM   2596  C   ALA   544      41.873   5.212  16.876  1.00 34.61
ATOM   2597  O   ALA   544      41.133   5.998  17.463  1.00 34.47
ATOM   2598  N   HIS   545      43.180   5.159  17.113  1.00 36.16
ATOM   2599  CA  HIS   545      43.782   6.035  18.111  1.00 36.63
ATOM   2600  CB  HIS   545      45.216   5.635  18.445  1.00 38.84
ATOM   2601  CG  HIS   545      45.902   6.604  19.362  1.00 41.47
ATOM   2602  CD2 HIS   545      47.105   7.221  19.272  1.00 41.80
ATOM   2603  ND1 HIS   545      45.320   7.068  20.523  1.00 42.23
ATOM   2604  CE1 HIS   545      46.136   7.927  21.110  1.00 42.36
ATOM   2605  NE2 HIS   545      47.225   8.039  20.371  1.00 42.08
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FIGURE 1 (cont.)

ATOM	2606	C	HIS	545	43.773	7.491	17.709	1.00	36.37
ATOM	2607	O	HIS	545	43.606	8.358	18.561	1.00	37.33
ATOM	2608	N	PHE	546	44.043	7.767	16.437	1.00	35.97
ATOM	2609	CA	PHE	546	44.044	9.148	15.958	1.00	36.04
ATOM	2610	CB	PHE	546	44.565	9.232	14.520	1.00	35.63
ATOM	2611	CG	PHE	546	46.052	9.084	14.405	1.00	35.41
ATOM	2612	CD1	PHE	546	46.890	9.545	15.411	1.00	35.87
ATOM	2613	CD2	PHE	546	46.618	8.471	13.292	1.00	36.70
ATOM	2614	CE1	PHE	546	48.264	9.397	15.310	1.00	35.65
ATOM	2615	CE2	PHE	546	47.996	8.317	13.183	1.00	34.51
ATOM	2616	CZ	PHE	546	48.817	8.779	14.192	1.00	35.18
ATOM	2617	C	PHE	546	42.632	9.713	16.041	1.00	35.77
ATOM	2618	O	PHE	546	42.435	10.845	16.486	1.00	34.76
ATOM	2619	N	LEU	547	41.655	8.898	15.643	1.00	36.27
ATOM	2620	CA	LEU	547	40.244	9.287	15.673	1.00	36.99
ATOM	2621	CB	LEU	547	39.365	8.134	15.188	1.00	35.89
ATOM	2622	CG	LEU	547	37.856	8.399	15.168	1.00	35.86
ATOM	2623	CD1	LEU	547	37.535	9.650	14.342	1.00	34.64
ATOM	2624	CD2	LEU	547	37.143	7.178	14.609	1.00	35.41
ATOM	2625	C	LEU	547	39.824	9.718	17.075	1.00	37.45
ATOM	2626	O	LEU	547	39.218	10.776	17.253	1.00	36.59
ATOM	2627	N	SER	548	40.176	8.906	18.066	1.00	38.91
ATOM	2628	CA	SER	548	39.855	9.212	19.454	1.00	40.88
ATOM	2629	CB	SER	548	40.258	8.050	20.375	1.00	42.68
ATOM	2630	OG	SER	548	41.228	7.208	19.763	1.00	46.74
ATOM	2631	C	SER	548	40.534	10.505	19.902	1.00	40.49
ATOM	2632	O	SER	548	40.013	11.231	20.747	1.00	41.69
ATOM	2633	N	GLN	549	41.691	10.802	19.328	1.00	39.68
ATOM	2634	CA	GLN	549	42.395	12.015	19.686	1.00	39.49
ATOM	2635	CB	GLN	549	43.845	11.956	19.218	1.00	41.25
ATOM	2636	CG	GLN	549	44.736	11.018	20.006	1.00	42.18
ATOM	2637	CD	GLN	549	46.209	11.238	19.706	1.00	42.98
ATOM	2638	OE1	GLN	549	46.922	10.300	19.363	1.00	44.07
ATOM	2639	NE2	GLN	549	46.674	12.479	19.847	1.00	42.49
ATOM	2640	C	GLN	549	41.723	13.222	19.063	1.00	40.07
ATOM	2641	O	GLN	549	41.451	14.213	19.741	1.00	39.72
ATOM	2642	N	THR	550	41.437	13.124	17.770	1.00	41.21
ATOM	2643	CA	THR	550	40.824	14.222	17.036	1.00	43.02
ATOM	2644	CB	THR	550	40.714	13.920	15.515	1.00	43.79
ATOM	2645	OG1	THR	550	40.200	12.595	15.307	1.00	44.92
ATOM	2646	CG2	THR	550	42.069	14.041	14.857	1.00	43.92
ATOM	2647	C	THR	550	39.469	14.641	17.575	1.00	43.65
ATOM	2648	O	THR	550	39.197	15.836	17.716	1.00	43.09
ATOM	2649	N	LYS	551	38.611	13.671	17.871	1.00	45.05
ATOM	2650	CA	LYS	551	37.301	14.027	18.391	1.00	46.81
ATOM	2651	CB	LYS	551	36.265	12.922	18.145	1.00	45.60
ATOM	2652	CG	LYS	551	36.584	11.534	18.617	1.00	44.11
ATOM	2653	CD	LYS	551	35.523	10.578	18.052	1.00	42.52
ATOM	2654	CE	LYS	551	35.569	9.206	18.706	1.00	41.73
ATOM	2655	NZ	LYS	551	34.474	8.315	18.244	1.00	39.62
ATOM	2656	C	LYS	551	37.345	14.523	19.837	1.00	47.87
ATOM	2657	O	LYS	551	36.420	15.198	20.304	1.00	48.23
ATOM	2658	N	GLN	552	38.473	14.275	20.499	1.00	49.00
ATOM	2659	CA	GLN	552	38.699	14.719	21.870	1.00	49.66
ATOM	2660	CB	GLN	552	39.705	13.800	22.555	1.00	51.22
ATOM	2661	CG	GLN	552	40.070	14.232	23.961	1.00	55.28
ATOM	2662	CD	GLN	552	41.365	13.612	24.435	1.00	57.87
ATOM	2663	OE1	GLN	552	41.518	12.388	24.443	1.00	59.24

FIGURE 1 (cont.)

ATOM	2664	NE2	GLN	552	42.315	14.457	24.827	1.00	59.52
ATOM	2665	C	GLN	552	39.250	16.150	21.837	1.00	50.06
ATOM	2666	O	GLN	552	39.060	16.930	22.776	1.00	49.38
ATOM	2667	N	SER	553	39.944	16.479	20.748	1.00	50.55
ATOM	2668	CA	SER	553	40.532	17.802	20.560	1.00	50.62
ATOM	2669	CB	SER	553	41.660	17.742	19.514	1.00	50.03
ATOM	2670	OG	SER	553	41.169	17.575	18.189	1.00	47.69
ATOM	2671	C	SER	553	39.494	18.833	20.129	1.00	51.44
ATOM	2672	O	SER	553	39.792	20.024	20.048	1.00	52.81
ATOM	2673	N	GLY	554	38.282	18.375	19.840	1.00	52.03
ATOM	2674	CA	GLY	554	37.240	19.282	19.397	1.00	52.43
ATOM	2675	C	GLY	554	37.401	19.638	17.924	1.00	52.57
ATOM	2676	O	GLY	554	36.778	20.581	17.426	1.00	53.51
ATOM	2677	N	GLU	555	38.231	18.874	17.221	1.00	51.69
ATOM	2678	CA	GLU	555	38.470	19.103	15.802	1.00	50.16
ATOM	2679	CB	GLU	555	39.399	18.011	15.259	1.00	51.56
ATOM	2680	CG	GLU	555	40.415	18.498	14.237	1.00	53.15
ATOM	2681	CD	GLU	555	41.455	19.438	14.830	1.00	53.99
ATOM	2682	OE1	GLU	555	42.325	18.955	15.595	1.00	54.91
ATOM	2683	OE2	GLU	555	41.406	20.652	14.521	1.00	53.02
ATOM	2684	C	GLU	555	37.136	19.099	15.047	1.00	47.60
ATOM	2685	O	GLU	555	36.346	18.171	15.193	1.00	48.20
ATOM	2686	N	ASN	556	36.916	20.125	14.226	1.00	45.50
ATOM	2687	CA	ASN	556	35.683	20.303	13.439	1.00	42.96
ATOM	2688	CB	ASN	556	35.796	21.560	12.573	1.00	44.24
ATOM	2689	CG	ASN	556	34.507	22.366	12.529	1.00	45.63
ATOM	2690	OD1	ASN	556	34.544	23.589	12.485	1.00	46.71
ATOM	2691	ND2	ASN	556	33.366	21.687	12.533	1.00	46.27
ATOM	2692	C	ASN	556	35.240	19.117	12.564	1.00	40.45
ATOM	2693	O	ASN	556	34.038	18.830	12.448	1.00	41.36
ATOM	2694	N	PHE	557	36.188	18.477	11.894	1.00	35.01
ATOM	2695	CA	PHE	557	35.874	17.321	11.056	1.00	30.51
ATOM	2696	CB	PHE	557	36.141	17.617	9.575	1.00	26.25
ATOM	2697	CG	PHE	557	35.119	18.516	8.936	1.00	24.10
ATOM	2698	CD1	PHE	557	35.093	19.878	9.212	1.00	23.27
ATOM	2699	CD2	PHE	557	34.184	18.001	8.050	1.00	21.00
ATOM	2700	CE1	PHE	557	34.150	20.710	8.612	1.00	20.85
ATOM	2701	CE2	PHE	557	33.243	18.825	7.450	1.00	18.34
ATOM	2702	CZ	PHE	557	33.225	20.174	7.731	1.00	20.74
ATOM	2703	C	PHE	557	36.809	16.228	11.535	1.00	29.61
ATOM	2704	O	PHE	557	37.739	15.845	10.825	1.00	30.80
ATOM	2705	N	PRO	558	36.557	15.687	12.738	1.00	28.44
ATOM	2706	CD	PRO	558	35.338	15.899	13.535	1.00	27.55
ATOM	2707	CA	PRO	558	37.378	14.633	13.341	1.00	27.40
ATOM	2708	CB	PRO	558	36.580	14.244	14.586	1.00	27.92
ATOM	2709	CG	PRO	558	35.178	14.573	14.212	1.00	28.58
ATOM	2710	C	PRO	558	37.715	13.434	12.459	1.00	25.97
ATOM	2711	O	PRO	558	38.848	12.948	12.490	1.00	25.27
ATOM	2712	N	TYR	559	36.763	12.977	11.652	1.00	23.97
ATOM	2713	CA	TYR	559	37.039	11.836	10.796	1.00	23.89
ATOM	2714	CB	TYR	559	35.753	11.193	10.258	1.00	21.95
ATOM	2715	CG	TYR	559	35.984	9.781	9.769	1.00	21.57
ATOM	2716	CD1	TYR	559	35.891	8.685	10.639	1.00	24.12
ATOM	2717	CE1	TYR	559	36.204	7.389	10.207	1.00	22.12
ATOM	2718	CD2	TYR	559	36.382	9.541	8.461	1.00	22.30
ATOM	2719	CE2	TYR	559	36.696	8.261	8.024	1.00	22.08
ATOM	2720	CZ	TYR	559	36.610	7.199	8.895	1.00	22.68
ATOM	2721	OH	TYR	559	36.966	5.958	8.437	1.00	28.01

FIGURE 1 (cont.)

ATOM	2722	C	TYR	559	38.002	12.202	9.661	1.00	23.70
ATOM	2723	O	TYR	559	38.932	11.451	9.360	1.00	25.56
ATOM	2724	N	LEU	560	37.819	13.366	9.053	1.00	23.40
ATOM	2725	CA	LEU	560	38.716	13.756	7.965	1.00	22.40
ATOM	2726	CB	LEU	560	38.184	14.979	7.203	1.00	19.29
ATOM	2727	CG	LEU	560	36.905	14.744	6.387	1.00	19.21
ATOM	2728	CD1	LEU	560	36.621	15.965	5.524	1.00	17.94
ATOM	2729	CD2	LEU	560	37.023	13.499	5.508	1.00	16.77
ATOM	2730	C	LEU	560	40.133	14.007	8.475	1.00	21.57
ATOM	2731	O	LEU	560	41.096	13.511	7.896	1.00	22.32
ATOM	2732	N	VAL	561	40.247	14.730	9.587	1.00	21.43
ATOM	2733	CA	VAL	561	41.543	15.049	10.175	1.00	20.86
ATOM	2734	CB	VAL	561	41.404	15.990	11.397	1.00	20.24
ATOM	2735	CG1	VAL	561	42.761	16.265	12.011	1.00	22.08
ATOM	2736	CG2	VAL	561	40.789	17.309	10.972	1.00	20.07
ATOM	2737	C	VAL	561	42.276	13.774	10.566	1.00	21.69
ATOM	2738	O	VAL	561	43.384	13.537	10.103	1.00	22.16
ATOM	2739	N	ALA	562	41.634	12.936	11.379	1.00	22.88
ATOM	2740	CA	ALA	562	42.210	11.672	11.831	1.00	22.13
ATOM	2741	CB	ALA	562	41.248	10.966	12.728	1.00	20.52
ATOM	2742	C	ALA	562	42.580	10.763	10.663	1.00	23.28
ATOM	2743	O	ALA	562	43.571	10.031	10.728	1.00	24.95
ATOM	2744	N	TYR	563	41.787	10.792	9.596	1.00	23.47
ATOM	2745	CA	TYR	563	42.083	9.952	8.443	1.00	24.18
ATOM	2746	CB	TYR	563	40.887	9.861	7.496	1.00	24.43
ATOM	2747	CG	TYR	563	40.962	8.633	6.631	1.00	25.76
ATOM	2748	CD1	TYR	563	40.645	7.376	7.151	1.00	26.28
ATOM	2749	CE1	TYR	563	40.789	6.222	6.386	1.00	27.58
ATOM	2750	CD2	TYR	563	41.418	8.708	5.315	1.00	26.40
ATOM	2751	CE2	TYR	563	41.566	7.560	4.538	1.00	27.19
ATOM	2752	CZ	TYR	563	41.251	6.322	5.081	1.00	27.76
ATOM	2753	OH	TYR	563	41.391	5.193	4.314	1.00	29.58
ATOM	2754	C	TYR	563	43.345	10.426	7.701	1.00	23.93
ATOM	2755	O	TYR	563	44.206	9.612	7.341	1.00	23.21
ATOM	2756	N	GLN	564	43.452	11.736	7.478	1.00	23.24
ATOM	2757	CA	GLN	564	44.631	12.298	6.825	1.00	22.78
ATOM	2758	CB	GLN	564	44.510	13.825	6.675	1.00	21.93
ATOM	2759	CG	GLN	564	45.804	14.539	6.222	1.00	21.73
ATOM	2760	CD	GLN	564	46.209	14.241	4.781	1.00	21.45
ATOM	2761	OE1	GLN	564	45.773	14.928	3.846	1.00	21.98
ATOM	2762	NE2	GLN	564	47.055	13.231	4.595	1.00	18.62
ATOM	2763	C	GLN	564	45.843	11.951	7.689	1.00	22.24
ATOM	2764	O	GLN	564	46.898	11.598	7.170	1.00	22.24
ATOM	2765	N	ALA	565	45.671	12.015	9.006	1.00	22.72
ATOM	2766	CA	ALA	565	46.749	11.700	9.938	1.00	24.32
ATOM	2767	CB	ALA	565	46.330	12.008	11.362	1.00	23.28
ATOM	2768	C	ALA	565	47.138	10.232	9.803	1.00	25.85
ATOM	2769	O	ALA	565	48.324	9.890	9.830	1.00	26.02
ATOM	2770	N	THR	566	46.138	9.377	9.607	1.00	26.56
ATOM	2771	CA	THR	566	46.359	7.939	9.446	1.00	27.00
ATOM	2772	CB	THR	566	45.007	7.215	9.330	1.00	25.94
ATOM	2773	OG1	THR	566	44.338	7.276	10.593	1.00	26.58
ATOM	2774	CG2	THR	566	45.184	5.770	8.926	1.00	25.45
ATOM	2775	C	THR	566	47.228	7.647	8.212	1.00	26.39
ATOM	2776	O	THR	566	48.239	6.951	8.288	1.00	26.71
ATOM	2777	N	VAL	567	46.823	8.205	7.082	1.00	26.66
ATOM	2778	CA	VAL	567	47.533	8.047	5.824	1.00	25.23
ATOM	2779	CB	VAL	567	46.777	8.804	4.704	1.00	24.80

FIGURE 1 (cont.)

ATOM	2780	CG1	VAL	567	47.633	8.941	3.480	1.00	24.37
ATOM	2781	CG2	VAL	567	45.473	8.053	4.362	1.00	24.95
ATOM	2782	C	VAL	567	48.989	8.519	5.947	1.00	24.66
ATOM	2783	O	VAL	567	49.903	7.867	5.438	1.00	24.50
ATOM	2784	N	CYS	568	49.202	9.622	6.656	1.00	24.76
ATOM	2785	CA	CYS	568	50.544	10.156	6.861	1.00	25.31
ATOM	2786	CB	CYS	568	50.490	11.529	7.546	1.00	24.87
ATOM	2787	SG	CYS	568	49.934	12.883	6.493	1.00	23.18
ATOM	2788	C	CYS	568	51.357	9.188	7.717	1.00	26.58
ATOM	2789	O	CYS	568	52.460	8.797	7.351	1.00	26.47
ATOM	2790	N	ALA	569	50.794	8.776	8.843	1.00	27.17
ATOM	2791	CA	ALA	569	51.484	7.862	9.726	1.00	28.58
ATOM	2792	CB	ALA	569	50.601	7.502	10.904	1.00	28.99
ATOM	2793	C	ALA	569	51.899	6.607	8.967	1.00	30.34
ATOM	2794	O	ALA	569	53.086	6.270	8.921	1.00	31.47
ATOM	2795	N	ARG	570	50.938	5.961	8.308	1.00	30.52
ATOM	2796	CA	ARG	570	51.210	4.732	7.567	1.00	30.59
ATOM	2797	CB	ARG	570	49.918	4.143	6.992	1.00	30.69
ATOM	2798	CG	ARG	570	48.997	3.561	8.054	1.00	30.15
ATOM	2799	CD	ARG	570	47.765	2.913	7.458	1.00	29.12
ATOM	2800	NE	ARG	570	46.828	2.506	8.507	1.00	30.17
ATOM	2801	CZ	ARG	570	45.516	2.374	8.336	1.00	27.42
ATOM	2802	NH1	ARG	570	44.748	1.995	9.347	1.00	29.10
ATOM	2803	NH2	ARG	570	44.966	2.638	7.163	1.00	27.47
ATOM	2804	C	ARG	570	52.253	4.890	6.469	1.00	31.40
ATOM	2805	O	ARG	570	52.902	3.923	6.084	1.00	33.32
ATOM	2806	N	ALA	571	52.390	6.103	5.944	1.00	31.42
ATOM	2807	CA	ALA	571	53.370	6.380	4.901	1.00	29.19
ATOM	2808	CB	ALA	571	52.795	7.363	3.905	1.00	26.97
ATOM	2809	C	ALA	571	54.636	6.960	5.536	1.00	30.02
ATOM	2810	O	ALA	571	55.630	7.179	4.859	1.00	31.04
ATOM	2811	N	GLN	572	54.609	7.157	6.850	1.00	31.02
ATOM	2812	CA	GLN	572	55.727	7.753	7.568	1.00	31.99
ATOM	2813	CB	GLN	572	56.946	6.842	7.579	1.00	35.87
ATOM	2814	CG	GLN	572	56.830	5.689	8.542	1.00	41.94
ATOM	2815	CD	GLN	572	58.170	5.040	8.801	1.00	45.72
ATOM	2816	OE1	GLN	572	58.562	4.819	9.954	1.00	47.02
ATOM	2817	NE2	GLN	572	58.894	4.740	7.726	1.00	48.15
ATOM	2818	C	GLN	572	56.071	9.093	6.935	1.00	30.48
ATOM	2819	O	GLN	572	57.235	9.489	6.880	1.00	30.24
ATOM	2820	N	ALA	573	55.029	9.765	6.451	1.00	28.34
ATOM	2821	CA	ALA	573	55.114	11.072	5.814	1.00	26.25
ATOM	2822	CB	ALA	573	54.253	11.084	4.537	1.00	24.36
ATOM	2823	C	ALA	573	54.601	12.113	6.822	1.00	25.50
ATOM	2824	O	ALA	573	53.844	11.783	7.744	1.00	24.77
ATOM	2825	N	PRO	574	55.049	13.370	6.699	1.00	24.64
ATOM	2826	CD	PRO	574	56.068	13.892	5.771	1.00	24.05
ATOM	2827	CA	PRO	574	54.595	14.404	7.633	1.00	24.57
ATOM	2828	CB	PRO	574	55.675	15.471	7.500	1.00	25.21
ATOM	2829	CG	PRO	574	56.036	15.383	6.042	1.00	26.61
ATOM	2830	C	PRO	574	53.227	14.957	7.253	1.00	25.52
ATOM	2831	O	PRO	574	52.784	14.813	6.107	1.00	25.99
ATOM	2832	N	PRO	575	52.525	15.580	8.212	1.00	25.30
ATOM	2833	CD	PRO	575	52.893	15.792	9.622	1.00	24.49
ATOM	2834	CA	PRO	575	51.202	16.146	7.926	1.00	25.44
ATOM	2835	CB	PRO	575	50.717	16.584	9.309	1.00	25.55
ATOM	2836	CG	PRO	575	51.989	16.927	10.022	1.00	25.38
ATOM	2837	C	PRO	575	51.327	17.324	6.955	1.00	25.27

FIGURE 1 (cont.)

ATOM	2838	O	PRO	575	52.439	17.751	6.630	1.00	24.04
ATOM	2839	N	PRO	576	50.190	17.827	6.440	1.00	25.82
ATOM	2840	CD	PRO	576	48.829	17.300	6.637	1.00	24.51
ATOM	2841	CA	PRO	576	50.171	18.952	5.501	1.00	26.20
ATOM	2842	CB	PRO	576	48.686	19.236	5.357	1.00	24.96
ATOM	2843	CG	PRO	576	48.099	17.876	5.460	1.00	25.27
ATOM	2844	C	PRO	576	50.935	20.158	6.031	1.00	27.89
ATOM	2845	O	PRO	576	51.529	20.921	5.262	1.00	28.06
ATOM	2846	N	SER	577	50.893	20.333	7.345	1.00	29.44
ATOM	2847	CA	SER	577	51.599	21.415	8.012	1.00	30.58
ATOM	2848	CB	SER	577	50.800	22.720	7.946	1.00	29.32
ATOM	2849	OG	SER	577	49.630	22.650	8.739	1.00	29.45
ATOM	2850	C	SER	577	51.777	20.963	9.452	1.00	32.15
ATOM	2851	O	SER	577	51.410	19.839	9.801	1.00	31.77
ATOM	2852	N	TRP	578	52.371	21.819	10.276	1.00	34.52
ATOM	2853	CA	TRP	578	52.580	21.500	11.680	1.00	35.77
ATOM	2854	CB	TRP	578	54.069	21.540	12.040	1.00	36.18
ATOM	2855	CG	TRP	578	54.784	20.303	11.588	1.00	36.28
ATOM	2856	CD2	TRP	578	54.612	18.983	12.111	1.00	36.36
ATOM	2857	CE2	TRP	578	55.441	18.121	11.353	1.00	35.89
ATOM	2858	CE3	TRP	578	53.835	18.443	13.148	1.00	35.12
ATOM	2859	CD1	TRP	578	55.691	20.196	10.564	1.00	35.71
ATOM	2860	NE1	TRP	578	56.086	18.887	10.418	1.00	35.51
ATOM	2861	CZ2	TRP	578	55.513	16.746	11.599	1.00	35.54
ATOM	2862	CZ3	TRP	578	53.907	17.078	13.391	1.00	35.54
ATOM	2863	CH2	TRP	578	54.741	16.244	12.619	1.00	36.06
ATOM	2864	C	TRP	578	51.761	22.431	12.555	1.00	35.97
ATOM	2865	O	TRP	578	52.179	22.832	13.635	1.00	36.76
ATOM	2866	N	ASP	579	50.595	22.800	12.051	1.00	36.49
ATOM	2867	CA	ASP	579	49.694	23.656	12.786	1.00	38.09
ATOM	2868	CB	ASP	579	48.710	24.314	11.819	1.00	41.72
ATOM	2869	CG	ASP	579	49.409	25.243	10.817	1.00	45.89
ATOM	2870	OD1	ASP	579	49.175	25.102	9.595	1.00	48.85
ATOM	2871	OD2	ASP	579	50.197	26.119	11.248	1.00	48.08
ATOM	2872	C	ASP	579	48.999	22.742	13.792	1.00	37.56
ATOM	2873	O	ASP	579	48.998	21.528	13.606	1.00	38.03
ATOM	2874	N	ALA	580	48.419	23.316	14.847	1.00	36.79
ATOM	2875	CA	ALA	580	47.748	22.552	15.915	1.00	35.50
ATOM	2876	CB	ALA	580	46.956	23.496	16.810	1.00	36.40
ATOM	2877	C	ALA	580	46.856	21.391	15.470	1.00	34.02
ATOM	2878	O	ALA	580	46.700	20.404	16.188	1.00	32.85
ATOM	2879	N	MET	581	46.272	21.520	14.285	1.00	33.63
ATOM	2880	CA	MET	581	45.401	20.492	13.740	1.00	32.54
ATOM	2881	CB	MET	581	44.908	20.902	12.348	1.00	32.51
ATOM	2882	CG	MET	581	44.043	19.857	11.656	1.00	31.86
ATOM	2883	SD	MET	581	43.448	20.404	10.057	1.00	33.21
ATOM	2884	CE	MET	581	42.419	21.765	10.534	1.00	34.37
ATOM	2885	C	MET	581	46.119	19.158	13.636	1.00	32.20
ATOM	2886	O	MET	581	45.470	18.113	13.609	1.00	33.12
ATOM	2887	N	TRP	582	47.450	19.194	13.591	1.00	30.73
ATOM	2888	CA	TRP	582	48.246	17.979	13.455	1.00	29.56
ATOM	2889	CB	TRP	582	49.078	18.060	12.172	1.00	25.83
ATOM	2890	CG	TRP	582	48.252	18.490	10.972	1.00	22.26
ATOM	2891	CD2	TRP	582	47.205	17.743	10.330	1.00	19.39
ATOM	2892	CE2	TRP	582	46.672	18.563	9.319	1.00	18.29
ATOM	2893	CE3	TRP	582	46.666	16.461	10.515	1.00	18.37
ATOM	2894	CD1	TRP	582	48.312	19.690	10.331	1.00	19.79
ATOM	2895	NE1	TRP	582	47.367	19.744	9.345	1.00	19.82

FIGURE 1 (cont.)

```
ATOM   2896  CZ2 TRP   582      45.620  18.148   8.490  1.00 16.85
ATOM   2897  CZ3 TRP   582      45.623  16.047   9.693  1.00 16.11
ATOM   2898  CH2 TRP   582      45.111  16.891   8.694  1.00 17.32
ATOM   2899  C   TRP   582      49.121  17.630  14.661  1.00 31.31
ATOM   2900  O   TRP   582      50.215  17.097  14.519  1.00 31.41
ATOM   2901  N   ALA   583      48.589  17.866  15.856  1.00 34.62
ATOM   2902  CA  ALA   583      49.285  17.575  17.107  1.00 34.61
ATOM   2903  CB  ALA   583      48.493  18.145  18.283  1.00 34.87
ATOM   2904  C   ALA   583      49.496  16.075  17.295  1.00 34.99
ATOM   2905  O   ALA   583      50.489  15.646  17.877  1.00 35.31
ATOM   2906  N   CYS   584      48.560  15.282  16.788  1.00 37.04
ATOM   2907  CA  CYS   584      48.610  13.815  16.893  1.00 38.08
ATOM   2908  CB  CYS   584      47.396  13.199  16.182  1.00 37.55
ATOM   2909  SG  CYS   584      47.130  13.868  14.512  1.00 40.22
ATOM   2910  C   CYS   584      49.886  13.200  16.317  1.00 37.89
ATOM   2911  O   CYS   584      50.375  12.178  16.809  1.00 37.62
ATOM   2912  N   LEU   585      50.422  13.835  15.279  1.00 37.89
ATOM   2913  CA  LEU   585      51.616  13.339  14.604  1.00 37.24
ATOM   2914  CB  LEU   585      51.506  13.590  13.099  1.00 34.72
ATOM   2915  CG  LEU   585      50.359  12.817  12.447  1.00 33.11
ATOM   2916  CD1 LEU   585      50.194  13.205  10.994  1.00 32.42
ATOM   2917  CD2 LEU   585      50.624  11.328  12.586  1.00 33.32
ATOM   2918  C   LEU   585      52.913  13.916  15.122  1.00 37.69
ATOM   2919  O   LEU   585      53.967  13.659  14.549  1.00 38.68
ATOM   2920  N   ILE   586      52.844  14.667  16.215  1.00 38.37
ATOM   2921  CA  ILE   586      54.033  15.286  16.776  1.00 39.55
ATOM   2922  CB  ILE   586      53.675  16.366  17.816  1.00 38.52
ATOM   2923  CG2 ILE   586      54.915  16.799  18.593  1.00 37.57
ATOM   2924  CG1 ILE   586      53.067  17.575  17.101  1.00 38.01
ATOM   2925  CD1 ILE   586      52.671  18.705  18.018  1.00 37.82
ATOM   2926  C   ILE   586      55.015  14.277  17.355  1.00 41.37
ATOM   2927  O   ILE   586      56.191  14.274  16.985  1.00 42.88
ATOM   2928  N   ALA   587      54.528  13.391  18.215  1.00 41.55
ATOM   2929  CA  ALA   587      55.381  12.390  18.832  1.00 41.50
ATOM   2930  CB  ALA   587      54.544  11.442  19.665  1.00 42.38
ATOM   2931  C   ALA   587      56.214  11.606  17.810  1.00 42.23
ATOM   2932  O   ALA   587      57.358  11.236  18.089  1.00 43.74
ATOM   2933  N   LEU   588      55.644  11.375  16.628  1.00 41.27
ATOM   2934  CA  LEU   588      56.315  10.627  15.561  1.00 39.52
ATOM   2935  CB  LEU   588      55.270   9.940  14.678  1.00 39.86
ATOM   2936  CG  LEU   588      54.315   8.889  15.240  1.00 38.47
ATOM   2937  CD1 LEU   588      53.206   8.640  14.235  1.00 36.97
ATOM   2938  CD2 LEU   588      55.072   7.609  15.545  1.00 37.35
ATOM   2939  C   LEU   588      57.190  11.497  14.656  1.00 39.04
ATOM   2940  O   LEU   588      58.020  10.984  13.912  1.00 36.99
ATOM   2941  N   LYS   589      56.999  12.809  14.742  1.00 40.00
ATOM   2942  CA  LYS   589      57.701  13.800  13.922  1.00 42.08
ATOM   2943  CB  LYS   589      57.711  15.158  14.635  1.00 40.84
ATOM   2944  CG  LYS   589      58.259  16.282  13.795  1.00 41.90
ATOM   2945  CD  LYS   589      57.780  17.626  14.304  1.00 43.78
ATOM   2946  CE  LYS   589      58.264  18.756  13.414  1.00 44.18
ATOM   2947  NZ  LYS   589      57.675  20.058  13.824  1.00 46.71
ATOM   2948  C   LYS   589      59.099  13.460  13.368  1.00 43.12
ATOM   2949  O   LYS   589      59.343  13.595  12.162  1.00 43.36
ATOM   2950  N   PRO   590      60.026  13.013  14.230  1.00 43.51
ATOM   2951  CD  PRO   590      59.933  12.911  15.698  1.00 44.56
ATOM   2952  CA  PRO   590      61.378  12.672  13.778  1.00 42.92
ATOM   2953  CB  PRO   590      62.039  12.177  15.059  1.00 44.20
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FIGURE 1 (cont.)

ATOM	2954	CG	PRO	590	61.380	13.008	16.112	1.00	44.80
ATOM	2955	C	PRO	590	61.432	11.598	12.700	1.00	42.62
ATOM	2956	O	PRO	590	62.368	11.558	11.901	1.00	44.16
ATOM	2957	N	THR	591	60.443	10.716	12.697	1.00	40.90
ATOM	2958	CA	THR	591	60.386	9.625	11.735	1.00	38.82
ATOM	2959	CB	THR	591	59.742	8.390	12.393	1.00	40.84
ATOM	2960	OG1	THR	591	58.390	8.691	12.775	1.00	41.16
ATOM	2961	CG2	THR	591	60.531	7.999	13.643	1.00	40.40
ATOM	2962	C	THR	591	59.637	9.953	10.441	1.00	36.37
ATOM	2963	O	THR	591	59.770	9.249	9.438	1.00	35.64
ATOM	2964	N	LEU	592	58.844	11.016	10.467	1.00	35.52
ATOM	2965	CA	LEU	592	58.054	11.415	9.308	1.00	32.95
ATOM	2966	CB	LEU	592	56.904	12.330	9.737	1.00	31.23
ATOM	2967	CG	LEU	592	55.935	11.656	10.719	1.00	30.46
ATOM	2968	CD1	LEU	592	54.765	12.565	11.025	1.00	30.71
ATOM	2969	CD2	LEU	592	55.438	10.341	10.145	1.00	28.34
ATOM	2970	C	LEU	592	58.945	12.090	8.293	1.00	32.65
ATOM	2971	O	LEU	592	59.561	13.116	8.579	1.00	31.57
ATOM	2972	N	HIS	593	58.998	11.508	7.100	1.00	33.01
ATOM	2973	CA	HIS	593	59.840	12.005	6.016	1.00	33.45
ATOM	2974	CB	HIS	593	61.103	11.140	5.916	1.00	36.56
ATOM	2975	CG	HIS	593	60.814	9.677	5.743	1.00	40.30
ATOM	2976	CD2	HIS	593	60.734	8.908	4.632	1.00	41.91
ATOM	2977	ND1	HIS	593	60.502	8.849	6.801	1.00	42.01
ATOM	2978	CE1	HIS	593	60.239	7.634	6.351	1.00	41.87
ATOM	2979	NE2	HIS	593	60.371	7.643	5.037	1.00	42.34
ATOM	2980	C	HIS	593	59.133	11.968	4.670	1.00	31.17
ATOM	2981	O	HIS	593	58.321	11.084	4.398	1.00	30.16
ATOM	2982	N	GLY	594	59.478	12.925	3.821	1.00	30.14
ATOM	2983	CA	GLY	594	58.907	12.975	2.490	1.00	27.59
ATOM	2984	C	GLY	594	57.747	13.918	2.282	1.00	24.95
ATOM	2985	O	GLY	594	57.465	14.775	3.123	1.00	26.12
ATOM	2986	N	PRO	595	57.093	13.815	1.119	1.00	22.45
ATOM	2987	CD	PRO	595	57.443	12.914	0.005	1.00	21.56
ATOM	2988	CA	PRO	595	55.951	14.652	0.776	1.00	21.39
ATOM	2989	CB	PRO	595	55.888	14.516	-0.739	1.00	21.51
ATOM	2990	CG	PRO	595	56.283	13.091	-0.953	1.00	21.07
ATOM	2991	C	PRO	595	54.684	14.117	1.443	1.00	21.15
ATOM	2992	O	PRO	595	54.562	12.927	1.741	1.00	21.34
ATOM	2993	N	THR	596	53.752	15.017	1.695	1.00	20.85
ATOM	2994	CA	THR	596	52.489	14.685	2.314	1.00	19.78
ATOM	2995	CB	THR	596	51.855	15.958	2.914	1.00	18.44
ATOM	2996	OG1	THR	596	52.742	16.520	3.890	1.00	18.54
ATOM	2997	CG2	THR	596	50.512	15.640	3.552	1.00	17.29
ATOM	2998	C	THR	596	51.499	14.121	1.304	1.00	19.38
ATOM	2999	O	THR	596	51.308	14.712	0.233	1.00	19.92
ATOM	3000	N	PRO	597	50.977	12.901	1.551	1.00	19.28
ATOM	3001	CD	PRO	597	51.461	11.862	2.478	1.00	18.63
ATOM	3002	CA	PRO	597	49.997	12.351	0.607	1.00	19.90
ATOM	3003	CB	PRO	597	49.972	10.863	0.970	1.00	19.83
ATOM	3004	CG	PRO	597	50.380	10.840	2.410	1.00	19.57
ATOM	3005	C	PRO	597	48.671	13.092	0.927	1.00	20.50
ATOM	3006	O	PRO	597	47.891	12.680	1.790	1.00	20.99
ATOM	3007	N	LEU	598	48.501	14.252	0.294	1.00	18.90
ATOM	3008	CA	LEU	598	47.355	15.120	0.510	1.00	17.83
ATOM	3009	CB	LEU	598	47.614	16.493	-0.128	1.00	17.96
ATOM	3010	CG	LEU	598	46.722	17.655	0.314	1.00	18.91
ATOM	3011	CD1	LEU	598	46.948	17.896	1.792	1.00	16.89

FIGURE 1 (cont.)

ATOM	3012	CD2	LEU	598	47.011	18.916	-0.490	1.00	16.71
ATOM	3013	C	LEU	598	46.037	14.542	0.010	1.00	17.19
ATOM	3014	O	LEU	598	45.862	14.285	-1.187	1.00	17.59
ATOM	3015	N	LEU	599	45.097	14.378	0.935	1.00	15.70
ATOM	3016	CA	LEU	599	43.801	13.823	0.598	1.00	15.41
ATOM	3017	CB	LEU	599	43.236	13.034	1.782	1.00	14.25
ATOM	3018	CG	LEU	599	44.071	11.861	2.304	1.00	14.47
ATOM	3019	CD1	LEU	599	43.268	11.092	3.331	1.00	11.46
ATOM	3020	CD2	LEU	599	44.500	10.944	1.165	1.00	12.30
ATOM	3021	C	LEU	599	42.832	14.907	0.188	1.00	15.60
ATOM	3022	O	LEU	599	42.063	14.739	-0.743	1.00	14.98
ATOM	3023	N	TYR	600	42.889	16.022	0.902	1.00	16.33
ATOM	3024	CA	TYR	600	42.025	17.178	0.675	1.00	16.87
ATOM	3025	CB	TYR	600	40.607	16.876	1.177	1.00	16.11
ATOM	3026	CG	TYR	600	40.567	15.864	2.303	1.00	15.17
ATOM	3027	CD1	TYR	600	41.172	16.124	3.536	1.00	15.04
ATOM	3028	CE1	TYR	600	41.198	15.163	4.546	1.00	15.31
ATOM	3029	CD2	TYR	600	39.980	14.622	2.112	1.00	15.05
ATOM	3030	CE2	TYR	600	39.997	13.657	3.112	1.00	16.28
ATOM	3031	CZ	TYR	600	40.607	13.931	4.323	1.00	15.83
ATOM	3032	OH	TYR	600	40.623	12.953	5.295	1.00	18.80
ATOM	3033	C	TYR	600	42.644	18.279	1.516	1.00	16.31
ATOM	3034	O	TYR	600	43.624	18.025	2.212	1.00	17.03
ATOM	3035	N	ARG	601	42.083	19.485	1.480	1.00	17.91
ATOM	3036	CA	ARG	601	42.623	20.578	2.287	1.00	19.15
ATOM	3037	CB	ARG	601	42.991	21.775	1.407	1.00	19.16
ATOM	3038	CG	ARG	601	43.949	21.415	0.298	1.00	21.99
ATOM	3039	CD	ARG	601	44.411	22.615	-0.487	1.00	24.32
ATOM	3040	NE	ARG	601	45.189	22.200	-1.649	1.00	27.46
ATOM	3041	CZ	ARG	601	46.317	22.783	-2.052	1.00	29.91
ATOM	3042	NH1	ARG	601	46.954	22.328	-3.127	1.00	29.79
ATOM	3043	NH2	ARG	601	46.813	23.819	-1.385	1.00	29.28
ATOM	3044	C	ARG	601	41.688	21.004	3.420	1.00	20.23
ATOM	3045	O	ARG	601	40.501	21.273	3.208	1.00	20.27
ATOM	3046	N	LEU	602	42.237	21.035	4.630	1.00	21.19
ATOM	3047	CA	LEU	602	41.496	21.427	5.821	1.00	22.38
ATOM	3048	CB	LEU	602	41.437	20.264	6.809	1.00	22.22
ATOM	3049	CG	LEU	602	40.807	18.965	6.306	1.00	23.52
ATOM	3050	CD1	LEU	602	40.914	17.913	7.390	1.00	22.77
ATOM	3051	CD2	LEU	602	39.349	19.186	5.895	1.00	23.14
ATOM	3052	C	LEU	602	42.228	22.594	6.468	1.00	23.77
ATOM	3053	O	LEU	602	41.820	23.108	7.511	1.00	24.94
ATOM	3054	N	GLY	603	43.318	23.003	5.830	1.00	25.45
ATOM	3055	CA	GLY	603	44.131	24.087	6.330	1.00	25.21
ATOM	3056	C	GLY	603	45.240	24.352	5.339	1.00	26.57
ATOM	3057	O	GLY	603	45.160	23.924	4.183	1.00	26.29
ATOM	3058	N	ALA	604	46.293	25.021	5.796	1.00	27.24
ATOM	3059	CA	ALA	604	47.417	25.362	4.934	1.00	27.36
ATOM	3060	CB	ALA	604	48.215	26.499	5.554	1.00	27.18
ATOM	3061	C	ALA	604	48.315	24.164	4.684	1.00	26.80
ATOM	3062	O	ALA	604	48.598	23.395	5.603	1.00	26.71
ATOM	3063	N	VAL	605	48.728	23.990	3.431	1.00	28.18
ATOM	3064	CA	VAL	605	49.615	22.892	3.059	1.00	29.48
ATOM	3065	CB	VAL	605	49.089	22.064	1.812	1.00	28.74
ATOM	3066	CG1	VAL	605	47.642	21.658	2.015	1.00	28.64
ATOM	3067	CG2	VAL	605	49.221	22.825	0.518	1.00	29.95
ATOM	3068	C	VAL	605	51.000	23.487	2.821	1.00	30.10
ATOM	3069	O	VAL	605	51.255	24.133	1.807	1.00	30.89

FIGURE 1 (cont.)

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ATOM   3070  N   GLN   606      51.863  23.357   3.818  1.00 31.14
ATOM   3071  CA  GLN   606      53.213  23.897   3.720  1.00 32.44
ATOM   3072  CB  GLN   606      53.627  24.481   5.068  1.00 34.05
ATOM   3073  CG  GLN   606      52.846  25.750   5.412  1.00 38.82
ATOM   3074  CD  GLN   606      52.595  25.915   6.899  1.00 41.93
ATOM   3075  OE1 GLN   606      51.501  26.294   7.316  1.00 44.45
ATOM   3076  NE2 GLN   606      53.605  25.625   7.710  1.00 43.43
ATOM   3077  C   GLN   606      54.249  22.900   3.200  1.00 31.71
ATOM   3078  O   GLN   606      55.117  23.251   2.399  1.00 32.38
ATOM   3079  N   ASN   607      54.143  21.652   3.636  1.00 30.92
ATOM   3080  CA  ASN   607      55.074  20.616   3.208  1.00 29.53
ATOM   3081  CB  ASN   607      54.861  19.351   4.047  1.00 31.91
ATOM   3082  CG  ASN   607      55.911  18.281   3.778  1.00 34.41
ATOM   3083  OD1 ASN   607      57.109  18.580   3.692  1.00 35.38
ATOM   3084  ND2 ASN   607      55.471  17.035   3.626  1.00 33.25
ATOM   3085  C   ASN   607      54.892  20.287   1.728  1.00 28.03
ATOM   3086  O   ASN   607      53.937  20.733   1.089  1.00 27.96
ATOM   3087  N   GLU   608      55.852  19.566   1.164  1.00 26.45
ATOM   3088  CA  GLU   608      55.755  19.146  -0.227  1.00 25.62
ATOM   3089  CB  GLU   608      57.023  18.420  -0.663  1.00 28.49
ATOM   3090  CG  GLU   608      58.214  19.314  -0.845  1.00 33.96
ATOM   3091  CD  GLU   608      59.497  18.528  -0.996  1.00 38.84
ATOM   3092  OE1 GLU   608      59.482  17.495  -1.711  1.00 40.73
ATOM   3093  OE2 GLU   608      60.515  18.941  -0.388  1.00 40.03
ATOM   3094  C   GLU   608      54.604  18.168  -0.242  1.00 22.39
ATOM   3095  O   GLU   608      54.364  17.499   0.754  1.00 22.12
ATOM   3096  N   VAL   609      53.947  18.036  -1.384  1.00 21.16
ATOM   3097  CA  VAL   609      52.803  17.147  -1.525  1.00 19.97
ATOM   3098  CB  VAL   609      51.526  17.971  -1.943  1.00 18.69
ATOM   3099  CG1 VAL   609      50.343  17.049  -2.263  1.00 18.90
ATOM   3100  CG2 VAL   609      51.136  18.937  -0.851  1.00 17.99
ATOM   3101  C   VAL   609      53.020  16.099  -2.607  1.00 19.62
ATOM   3102  O   VAL   609      53.767  16.337  -3.560  1.00 19.53
ATOM   3103  N   THR   610      52.413  14.926  -2.419  1.00 19.46
ATOM   3104  CA  THR   610      52.412  13.872  -3.430  1.00 20.82
ATOM   3105  CB  THR   610      53.156  12.556  -3.003  1.00 21.42
ATOM   3106  OG1 THR   610      53.151  11.639  -4.108  1.00 21.70
ATOM   3107  CG2 THR   610      52.507  11.877  -1.806  1.00 20.08
ATOM   3108  C   THR   610      50.917  13.607  -3.657  1.00 21.22
ATOM   3109  O   THR   610      50.105  13.807  -2.743  1.00 22.98
ATOM   3110  N   LEU   611      50.541  13.278  -4.890  1.00 21.98
ATOM   3111  CA  LEU   611      49.145  12.981  -5.239  1.00 21.98
ATOM   3112  CB  LEU   611      48.648  13.895  -6.369  1.00 20.70
ATOM   3113  CG  LEU   611      48.629  15.415  -6.175  1.00 22.00
ATOM   3114  CD1 LEU   611      47.817  16.058  -7.299  1.00 20.18
ATOM   3115  CD2 LEU   611      48.018  15.759  -4.815  1.00 22.59
ATOM   3116  C   LEU   611      49.030  11.528  -5.700  1.00 22.41
ATOM   3117  O   LEU   611      48.086  11.155  -6.389  1.00 24.23
ATOM   3118  N   THR   612      49.997  10.709  -5.321  1.00 23.19
ATOM   3119  CA  THR   612      50.002   9.319  -5.732  1.00 25.23
ATOM   3120  CB  THR   612      51.449   8.834  -5.995  1.00 27.01
ATOM   3121  OG1 THR   612      52.242   8.995  -4.805  1.00 29.09
ATOM   3122  CG2 THR   612      52.079   9.633  -7.127  1.00 27.28
ATOM   3123  C   THR   612      49.331   8.350  -4.765  1.00 24.95
ATOM   3124  O   THR   612      49.217   7.168  -5.072  1.00 25.66
ATOM   3125  N   HIS   613      48.904   8.816  -3.595  1.00 24.14
ATOM   3126  CA  HIS   613      48.283   7.898  -2.653  1.00 23.56
ATOM   3127  CB  HIS   613      48.080   8.555  -1.292  1.00 21.38
```

FIGURE 1 (cont.)

ATOM	3128	CG	HIS	613	47.870	7.579	-0.171	1.00	21.58
ATOM	3129	CD2	HIS	613	48.699	7.162	0.814	1.00	21.05
ATOM	3130	ND1	HIS	613	46.680	6.909	0.026	1.00	20.95
ATOM	3131	CE1	HIS	613	46.788	6.118	1.080	1.00	18.99
ATOM	3132	NE2	HIS	613	48.002	6.255	1.577	1.00	19.71
ATOM	3133	C	HIS	613	46.962	7.381	-3.225	1.00	24.95
ATOM	3134	O	HIS	613	46.211	8.132	-3.855	1.00	24.56
ATOM	3135	N	PRO	614	46.683	6.074	-3.047	1.00	25.96
ATOM	3136	CD	PRO	614	47.577	5.083	-2.412	1.00	25.46
ATOM	3137	CA	PRO	614	45.455	5.430	-3.537	1.00	25.84
ATOM	3138	CB	PRO	614	45.526	4.051	-2.884	1.00	25.79
ATOM	3139	CG	PRO	614	46.989	3.774	-2.849	1.00	26.21
ATOM	3140	C	PRO	614	44.168	6.182	-3.137	1.00	26.01
ATOM	3141	O	PRO	614	43.253	6.346	-3.946	1.00	26.99
ATOM	3142	N	ILE	615	44.114	6.643	-1.890	1.00	25.62
ATOM	3143	CA	ILE	615	42.959	7.379	-1.383	1.00	25.23
ATOM	3144	CB	ILE	615	43.075	7.635	0.132	1.00	26.29
ATOM	3145	CG2	ILE	615	41.823	8.358	0.644	1.00	25.16
ATOM	3146	CG1	ILE	615	43.264	6.306	0.873	1.00	24.79
ATOM	3147	CD1	ILE	615	42.158	5.291	0.603	1.00	25.74
ATOM	3148	C	ILE	615	42.766	8.699	-2.127	1.00	25.02
ATOM	3149	O	ILE	615	41.641	9.075	-2.449	1.00	24.98
ATOM	3150	N	THR	616	43.870	9.388	-2.409	1.00	24.97
ATOM	3151	CA	THR	616	43.838	10.654	-3.142	1.00	24.03
ATOM	3152	CB	THR	616	45.268	11.208	-3.307	1.00	21.36
ATOM	3153	OG1	THR	616	45.880	11.313	-2.023	1.00	19.82
ATOM	3154	CG2	THR	616	45.255	12.573	-3.946	1.00	22.30
ATOM	3155	C	THR	616	43.234	10.403	-4.531	1.00	25.54
ATOM	3156	O	THR	616	42.312	11.107	-4.970	1.00	25.06
ATOM	3157	N	LYS	617	43.745	9.374	-5.205	1.00	26.21
ATOM	3158	CA	LYS	617	43.268	9.013	-6.532	1.00	26.68
ATOM	3159	CB	LYS	617	44.103	7.865	-7.106	1.00	29.57
ATOM	3160	CG	LYS	617	45.601	8.150	-7.174	1.00	32.92
ATOM	3161	CD	LYS	617	46.125	8.036	-8.593	1.00	36.18
ATOM	3162	CE	LYS	617	45.459	9.068	-9.512	1.00	39.50
ATOM	3163	NZ	LYS	617	45.780	8.867	-10.963	1.00	39.79
ATOM	3164	C	LYS	617	41.789	8.630	-6.469	1.00	25.76
ATOM	3165	O	LYS	617	41.023	8.968	-7.375	1.00	23.91
ATOM	3166	N	TYR	618	41.401	7.935	-5.397	1.00	25.82
ATOM	3167	CA	TYR	618	40.010	7.518	-5.180	1.00	26.33
ATOM	3168	CB	TYR	618	39.884	6.701	-3.883	1.00	28.26
ATOM	3169	CG	TYR	618	38.441	6.394	-3.504	1.00	32.04
ATOM	3170	CD1	TYR	618	37.768	5.307	-4.081	1.00	33.48
ATOM	3171	CE1	TYR	618	36.423	5.049	-3.804	1.00	32.78
ATOM	3172	CD2	TYR	618	37.725	7.221	-2.624	1.00	31.35
ATOM	3173	CE2	TYR	618	36.372	6.971	-2.339	1.00	31.99
ATOM	3174	CZ	TYR	618	35.735	5.880	-2.938	1.00	33.67
ATOM	3175	OH	TYR	618	34.421	5.588	-2.668	1.00	34.74
ATOM	3176	C	TYR	618	39.091	8.740	-5.086	1.00	26.08
ATOM	3177	O	TYR	618	38.135	8.871	-5.850	1.00	24.27
ATOM	3178	N	ILE	619	39.395	9.637	-4.148	1.00	26.53
ATOM	3179	CA	ILE	619	38.592	10.840	-3.952	1.00	26.78
ATOM	3180	CB	ILE	619	39.110	11.696	-2.771	1.00	26.09
ATOM	3181	CG2	ILE	619	38.201	12.890	-2.554	1.00	27.00
ATOM	3182	CG1	ILE	619	39.114	10.868	-1.484	1.00	24.87
ATOM	3183	CD1	ILE	619	39.696	11.585	-0.275	1.00	23.06
ATOM	3184	C	ILE	619	38.531	11.669	-5.232	1.00	27.63
ATOM	3185	O	ILE	619	37.510	12.299	-5.517	1.00	28.56

FIGURE 1 (cont.)

ATOM	3186	N	MET	620	39.603	11.635	-6.020	1.00	28.31
ATOM	3187	CA	MET	620	39.642	12.367	-7.281	1.00	29.16
ATOM	3188	CB	MET	620	41.047	12.339	-7.888	1.00	30.86
ATOM	3189	CG	MET	620	42.068	13.180	-7.133	1.00	31.31
ATOM	3190	SD	MET	620	43.700	13.152	-7.887	1.00	33.66
ATOM	3191	CE	MET	620	43.745	14.717	-8.555	1.00	34.32
ATOM	3192	C	MET	620	38.625	11.813	-8.274	1.00	29.85
ATOM	3193	O	MET	620	38.040	12.563	-9.048	1.00	29.99
ATOM	3194	N	THR	621	38.397	10.504	-8.248	1.00	31.58
ATOM	3195	CA	THR	621	37.412	9.909	-9.146	1.00	33.23
ATOM	3196	CB	THR	621	37.505	8.351	-9.182	1.00	34.83
ATOM	3197	OG1	THR	621	37.348	7.801	-7.865	1.00	34.63
ATOM	3198	CG2	THR	621	38.853	7.918	-9.741	1.00	34.93
ATOM	3199	C	THR	621	36.008	10.355	-8.727	1.00	33.69
ATOM	3200	O	THR	621	35.089	10.387	-9.539	1.00	32.60
ATOM	3201	N	CYS	622	35.860	10.705	-7.449	1.00	35.29
ATOM	3202	CA	CYS	622	34.582	11.166	-6.915	1.00	36.11
ATOM	3203	CB	CYS	622	34.584	11.148	-5.379	1.00	34.25
ATOM	3204	SG	CYS	622	34.541	9.474	-4.630	1.00	34.81
ATOM	3205	C	CYS	622	34.282	12.565	-7.434	1.00	37.34
ATOM	3206	O	CYS	622	33.124	12.980	-7.498	1.00	38.25
ATOM	3207	N	MET	623	35.329	13.284	-7.823	1.00	38.28
ATOM	3208	CA	MET	623	35.161	14.626	-8.352	1.00	40.10
ATOM	3209	CB	MET	623	36.477	15.399	-8.297	1.00	38.66
ATOM	3210	CG	MET	623	37.160	15.447	-6.952	1.00	38.37
ATOM	3211	SD	MET	623	36.295	16.417	-5.730	1.00	38.37
ATOM	3212	CE	MET	623	36.561	15.423	-4.310	1.00	38.68
ATOM	3213	C	MET	623	34.701	14.559	-9.809	1.00	42.69
ATOM	3214	O	MET	623	33.953	15.425	-10.263	1.00	44.25
ATOM	3215	N	SER	624	35.169	13.544	-10.539	1.00	44.54
ATOM	3216	CA	SER	624	34.843	13.373	-11.959	1.00	45.95
ATOM	3217	CB	SER	624	35.862	12.432	-12.624	1.00	46.09
ATOM	3218	OG	SER	624	36.043	11.237	-11.879	1.00	45.68
ATOM	3219	C	SER	624	33.408	12.937	-12.294	1.00	46.50
ATOM	3220	O	SER	624	32.901	11.984	-11.658	1.00	48.12

SULFATE ION COORDINATES

		Atom Type	Resid	#	X	Y	Z	OCC	B
ATOM	3221	S	SO4	1001	8.646	28.709	22.190	1.00	32.01
ATOM	3222	O1	SO4	1001	9.006	27.263	22.094	1.00	35.92
ATOM	3223	O2	SO4	1001	8.328	28.982	23.610	1.00	33.43
ATOM	3224	O3	SO4	1001	9.821	29.520	21.744	1.00	33.54
ATOM	3225	O4	SO4	1001	7.429	28.930	21.367	1.00	32.87

DNA COORDINATES

		Atom Type	Resid	#	X	Y	Z	OCC	B
ATOM	3226	O3'	THY	2	37.257	37.479	7.626	1.00	62.88
ATOM	3227	P	THY	3	38.537	37.587	8.598	1.00	64.59
ATOM	3228	O1P	THY	3	39.744	37.500	7.737	1.00	65.36
ATOM	3229	O2P	THY	3	38.349	38.772	9.478	1.00	64.52
ATOM	3230	O5'	THY	3	38.465	36.284	9.516	1.00	61.39
ATOM	3231	C2'	THY	3	39.582	33.841	11.157	1.00	57.22

FIGURE 1 (cont.)

ATOM	3232	C5'	THY	3	37.215	35.787	9.985	1.00	58.94
ATOM	3233	C4'	THY	3	37.364	34.359	10.454	1.00	57.48
ATOM	3234	O4'	THY	3	38.030	33.610	9.411	1.00	57.98
ATOM	3235	C1'	THY	3	39.244	33.059	9.901	1.00	57.84
ATOM	3236	C3'	THY	3	38.209	34.160	11.712	1.00	55.51
ATOM	3237	O3'	THY	3	37.714	33.032	12.440	1.00	53.32
ATOM	3238	P	THY	4	37.453	33.144	14.024	1.00	51.06
ATOM	3239	O1P	THY	4	38.284	32.114	14.682	1.00	52.62
ATOM	3240	O2P	THY	4	37.572	34.555	14.460	1.00	52.47
ATOM	3241	O5'	THY	4	35.934	32.695	14.174	1.00	51.46
ATOM	3242	N1	THY	4	33.007	29.972	13.415	1.00	46.84
ATOM	3243	C6	THY	4	34.293	29.767	12.965	1.00	47.09
ATOM	3244	C2	THY	4	31.944	29.300	12.868	1.00	45.86
ATOM	3245	O2	THY	4	30.796	29.449	13.234	1.00	45.89
ATOM	3246	N3	THY	4	32.280	28.434	11.866	1.00	46.41
ATOM	3247	C4	THY	4	33.542	28.179	11.371	1.00	47.33
ATOM	3248	O4	THY	4	33.690	27.380	10.465	1.00	49.11
ATOM	3249	C5	THY	4	34.610	28.916	11.991	1.00	47.24
ATOM	3250	C2'	THY	4	33.891	30.788	15.545	1.00	50.03
ATOM	3251	C5'	THY	4	34.879	33.651	14.170	1.00	50.28
ATOM	3252	C4'	THY	4	33.674	33.079	14.873	1.00	49.97
ATOM	3253	O4'	THY	4	32.919	32.228	13.976	1.00	48.97
ATOM	3254	C1'	THY	4	32.790	30.920	14.512	1.00	47.73
ATOM	3255	C3'	THY	4	34.075	32.202	16.056	1.00	50.49
ATOM	3256	O3'	THY	4	33.236	32.403	17.179	1.00	50.67
ATOM	3257	P	THY	5	33.285	31.347	18.371	1.00	47.87
ATOM	3258	O1P	THY	5	34.541	30.575	18.215	1.00	48.85
ATOM	3259	O2P	THY	5	33.015	32.074	19.631	1.00	48.56
ATOM	3260	O5'	THY	5	32.072	30.374	18.051	1.00	49.19
ATOM	3261	N1	THY	5	31.213	27.155	16.419	1.00	58.66
ATOM	3262	C6	THY	5	32.482	27.691	16.481	1.00	59.82
ATOM	3263	C2	THY	5	30.878	26.224	15.460	1.00	60.12
ATOM	3264	O2	THY	5	29.775	25.706	15.384	1.00	61.69
ATOM	3265	N3	THY	5	31.896	25.911	14.590	1.00	60.92
ATOM	3266	C4	THY	5	33.180	26.422	14.589	1.00	60.86
ATOM	3267	O4	THY	5	33.980	26.063	13.733	1.00	62.48
ATOM	3268	C5	THY	5	33.467	27.375	15.633	1.00	60.58
ATOM	3269	C2'	THY	5	30.746	27.746	18.796	1.00	54.89
ATOM	3270	C5'	THY	5	30.759	30.895	17.870	1.00	52.14
ATOM	3271	C4'	THY	5	29.741	29.807	18.097	1.00	53.54
ATOM	3272	O4'	THY	5	29.757	28.886	16.980	1.00	54.95
ATOM	3273	C1'	THY	5	30.192	27.595	17.387	1.00	56.51
ATOM	3274	C3'	THY	5	30.042	28.976	19.338	1.00	53.67
ATOM	3275	O3'	THY	5	28.841	28.640	20.011	1.00	53.59
ATOM	3276	P	THY	6	28.902	27.677	21.286	1.00	55.49
ATOM	3277	O1P	THY	6	30.314	27.643	21.757	1.00	54.73
ATOM	3278	O2P	THY	6	27.825	28.072	22.235	1.00	56.13
ATOM	3279	O5'	THY	6	28.517	26.262	20.665	1.00	56.29
ATOM	3280	N1	THY	6	29.855	23.122	18.173	1.00	60.63
ATOM	3281	C6	THY	6	30.949	23.677	18.806	1.00	61.06
ATOM	3282	C2	THY	6	29.949	22.610	16.902	1.00	61.67
ATOM	3283	O2	THY	6	28.995	22.152	16.291	1.00	61.78
ATOM	3284	N3	THY	6	31.212	22.658	16.363	1.00	63.46
ATOM	3285	C4	THY	6	32.355	23.175	16.950	1.00	63.98
ATOM	3286	O4	THY	6	33.427	23.132	16.348	1.00	66.37
ATOM	3287	C5	THY	6	32.171	23.732	18.268	1.00	62.56
ATOM	3288	C2'	THY	6	28.701	23.043	20.380	1.00	58.18
ATOM	3289	C5'	THY	6	27.266	26.086	19.995	1.00	55.60

FIGURE 1 (cont.)

ATOM	3290	C4'	THY	6	27.031	24.624	19.695	1.00	56.65
ATOM	3291	O4'	THY	6	27.827	24.224	18.554	1.00	57.17
ATOM	3292	C1'	THY	6	28.559	23.051	18.868	1.00	58.86
ATOM	3293	C3'	THY	6	27.402	23.677	20.838	1.00	57.43
ATOM	3294	O3'	THY	6	26.423	22.658	21.005	1.00	57.14
ATOM	3295	P	THY	7	26.118	22.092	22.476	1.00	55.41
ATOM	3296	O1P	THY	7	27.388	21.574	23.052	1.00	55.46
ATOM	3297	O2P	THY	7	25.341	23.126	23.212	1.00	55.42
ATOM	3298	O5'	THY	7	25.155	20.856	22.209	1.00	54.29
ATOM	3299	N1	THY	7	28.804	18.991	19.952	1.00	50.01
ATOM	3300	C6	THY	7	29.541	19.632	20.927	1.00	49.74
ATOM	3301	C2	THY	7	29.235	18.962	18.632	1.00	49.72
ATOM	3302	O2	THY	7	28.630	18.401	17.735	1.00	49.11
ATOM	3303	N3	THY	7	30.418	19.620	18.403	1.00	49.95
ATOM	3304	C4	THY	7	31.199	20.284	19.331	1.00	50.77
ATOM	3305	O4	THY	7	32.238	20.836	18.973	1.00	52.95
ATOM	3306	C5	THY	7	30.695	20.267	20.688	1.00	50.49
ATOM	3307	C2'	THY	7	27.275	18.299	21.813	1.00	49.16
ATOM	3308	C5'	THY	7	24.826	20.456	20.880	1.00	51.47
ATOM	3309	C4'	THY	7	25.318	19.048	20.636	1.00	49.37
ATOM	3310	O4'	THY	7	26.467	19.074	19.756	1.00	49.04
ATOM	3311	C1'	THY	7	27.533	18.322	20.317	1.00	49.64
ATOM	3312	C3'	THY	7	25.759	18.341	21.914	1.00	48.18
ATOM	3313	O3'	THY	7	25.208	17.033	22.016	1.00	45.69
ATOM	3314	P	THY	8	25.223	16.282	23.434	1.00	43.16
ATOM	3315	O1P	THY	8	26.128	17.012	24.351	1.00	44.74
ATOM	3316	O2P	THY	8	23.837	16.004	23.867	1.00	44.40
ATOM	3317	O5'	THY	8	25.923	14.895	23.096	1.00	45.67
ATOM	3318	N1	THY	8	29.550	14.234	20.725	1.00	45.65
ATOM	3319	C6	THY	8	30.514	14.642	21.618	1.00	44.74
ATOM	3320	C2	THY	8	29.464	14.791	19.469	1.00	46.33
ATOM	3321	O2	THY	8	28.611	14.482	18.661	1.00	48.73
ATOM	3322	N3	THY	8	30.418	15.737	19.193	1.00	46.38
ATOM	3323	C4	THY	8	31.416	16.183	20.035	1.00	45.35
ATOM	3324	O4	THY	8	32.203	17.041	19.650	1.00	44.96
ATOM	3325	C5	THY	8	31.435	15.573	21.343	1.00	45.22
ATOM	3326	C2'	THY	8	28.573	12.869	22.592	1.00	46.80
ATOM	3327	C5'	THY	8	25.331	13.994	22.171	1.00	46.20
ATOM	3328	C4'	THY	8	26.346	12.982	21.695	1.00	46.45
ATOM	3329	O4'	THY	8	27.289	13.613	20.792	1.00	45.83
ATOM	3330	C1'	THY	8	28.598	13.170	21.103	1.00	46.11
ATOM	3331	C3'	THY	8	27.170	12.324	22.806	1.00	46.52
ATOM	3332	O3'	THY	8	27.137	10.893	22.783	1.00	46.89

WATER MOLECULE COORDINATES

		Atom Type	Resid	#	X	Y	Z	OCC	B
ATOM	3333	OH2	TIP3	1	-0.245	23.385	32.975	1.00	19.18
ATOM	3334	OH2	TIP3	2	22.305	18.313	19.597	1.00	27.90
ATOM	3335	OH2	TIP3	3	16.363	43.283	27.772	1.00	24.59
ATOM	3336	OH2	TIP3	4	36.537	45.914	31.680	1.00	20.59
ATOM	3337	OH2	TIP3	5	17.542	27.937	8.465	1.00	18.37
ATOM	3338	OH2	TIP3	6	35.726	50.776	9.824	1.00	31.71
ATOM	3339	OH2	TIP3	7	20.453	38.335	27.173	1.00	47.06
ATOM	3340	OH2	TIP3	8	15.332	19.267	24.557	1.00	25.04
ATOM	3341	OH2	TIP3	9	31.258	50.983	30.493	1.00	29.38

FIGURE 1 (cont.)

ATOM	3342	OH2	TIP3	10	28.501	7.997	7.807	1.00 21.94
ATOM	3343	OH2	TIP3	11	24.624	24.209	25.328	1.00 24.23
ATOM	3344	OH2	TIP3	12	14.538	39.417	17.207	1.00 26.71
ATOM	3345	OH2	TIP3	13	19.304	29.672	7.885	1.00 17.01
ATOM	3346	OH2	TIP3	14	9.539	36.215	8.250	1.00 19.38
ATOM	3347	OH2	TIP3	15	22.976	53.935	15.769	1.00 19.99
ATOM	3348	OH2	TIP3	16	11.332	38.883	13.163	1.00 41.21
ATOM	3349	OH2	TIP3	17	44.389	17.456	4.710	1.00 25.71
ATOM	3350	OH2	TIP3	18	18.217	51.026	25.327	1.00 21.08
ATOM	3351	OH2	TIP3	19	52.875	8.529	0.460	1.00 38.69
ATOM	3352	OH2	TIP3	20	49.464	5.589	3.749	1.00 29.49
ATOM	3353	OH2	TIP3	21	18.312	39.750	29.166	1.00 35.93
ATOM	3354	OH2	TIP3	22	45.019	20.106	5.017	1.00 21.12
ATOM	3355	OH2	TIP3	23	0.745	18.945	33.170	1.00 25.64
ATOM	3356	OH2	TIP3	24	43.077	1.470	3.086	1.00 41.57
ATOM	3357	OH2	TIP3	25	32.242	40.177	37.162	1.00 30.45
ATOM	3358	OH2	TIP3	26	22.005	19.740	17.116	1.00 23.05
ATOM	3359	OH2	TIP3	27	23.883	51.464	21.877	1.00 39.16
ATOM	3360	OH2	TIP3	28	23.231	34.878	17.602	1.00 27.32
ATOM	3361	OH2	TIP3	29	16.275	41.943	30.227	1.00 44.09
ATOM	3362	OH2	TIP3	31	24.393	23.198	-0.349	1.00 34.79
ATOM	3363	OH2	TIP3	32	55.138	10.008	1.356	1.00 34.91
ATOM	3364	OH2	TIP3	33	8.529	32.844	5.639	1.00 48.78
ATOM	3365	OH2	TIP3	35	13.937	52.763	22.191	1.00 34.84
ATOM	3366	OH2	TIP3	36	17.459	5.667	9.998	1.00 37.45
ATOM	3367	OH2	TIP3	37	42.199	25.099	-1.836	1.00 37.69
ATOM	3368	OH2	TIP3	38	7.460	11.207	37.359	1.00 41.26
ATOM	3369	OH2	TIP3	39	24.315	32.263	19.069	1.00 27.49
ATOM	3370	OH2	TIP3	40	17.157	21.378	10.360	1.00 29.71
ATOM	3371	OH2	TIP3	41	13.157	9.144	28.767	1.00 32.39
ATOM	3372	OH2	TIP3	42	12.931	38.890	19.337	1.00 35.82
ATOM	3373	OH2	TIP3	43	38.696	43.515	31.888	1.00 28.12
ATOM	3374	OH2	TIP3	44	29.294	19.356	13.799	1.00 43.11
ATOM	3375	OH2	TIP3	45	9.044	7.812	9.252	1.00 19.18
ATOM	3376	OH2	TIP3	46	21.324	52.606	27.604	1.00 54.59
ATOM	3377	OH2	TIP3	47	30.914	34.967	12.824	1.00 25.06
ATOM	3378	OH2	TIP3	48	13.454	2.315	10.562	1.00 34.40
ATOM	3379	OH2	TIP3	49	28.876	32.558	13.029	1.00 51.94
ATOM	3380	OH2	TIP3	50	1.840	14.917	35.047	1.00 25.56
ATOM	3381	OH2	TIP3	51	20.036	5.057	8.439	1.00 38.71
ATOM	3382	OH2	TIP3	52	21.989	31.348	10.718	1.00 34.34
ATOM	3383	OH2	TIP3	53	22.314	46.201	35.658	1.00 33.59
ATOM	3384	OH2	TIP3	54	26.721	19.845	14.781	1.00 29.32
ATOM	3385	OH2	TIP3	55	21.199	6.956	15.517	1.00 31.86
ATOM	3386	OH2	TIP3	56	24.460	56.129	15.361	1.00 47.79
ATOM	3387	OH2	TIP3	57	24.841	34.491	13.673	1.00 35.87
ATOM	3388	OH2	TIP3	58	34.366	27.984	-0.318	1.00 26.26
ATOM	3389	OH2	TIP3	59	48.536	3.488	11.538	1.00 36.52
ATOM	3390	OH2	TIP3	60	2.038	28.386	33.590	1.00 32.11
ATOM	3391	OH2	TIP3	61	18.422	25.811	21.407	1.00 26.96
ATOM	3392	OH2	TIP3	62	12.957	44.530	11.249	1.00 28.06
ATOM	3393	OH2	TIP3	63	47.339	3.540	3.822	1.00 42.83
ATOM	3394	OH2	TIP3	64	11.061	26.825	19.834	1.00 26.76
ATOM	3395	OH2	TIP3	65	15.719	9.453	30.418	1.00 33.97
ATOM	3396	OH2	TIP3	66	45.394	-0.086	3.586	1.00 37.65
ATOM	3397	OH2	TIP3	67	33.010	41.548	8.551	1.00 53.15
ATOM	3398	OH2	TIP3	68	5.850	48.967	10.652	1.00 54.79
ATOM	3399	OH2	TIP3	69	27.164	56.234	13.872	1.00 23.47

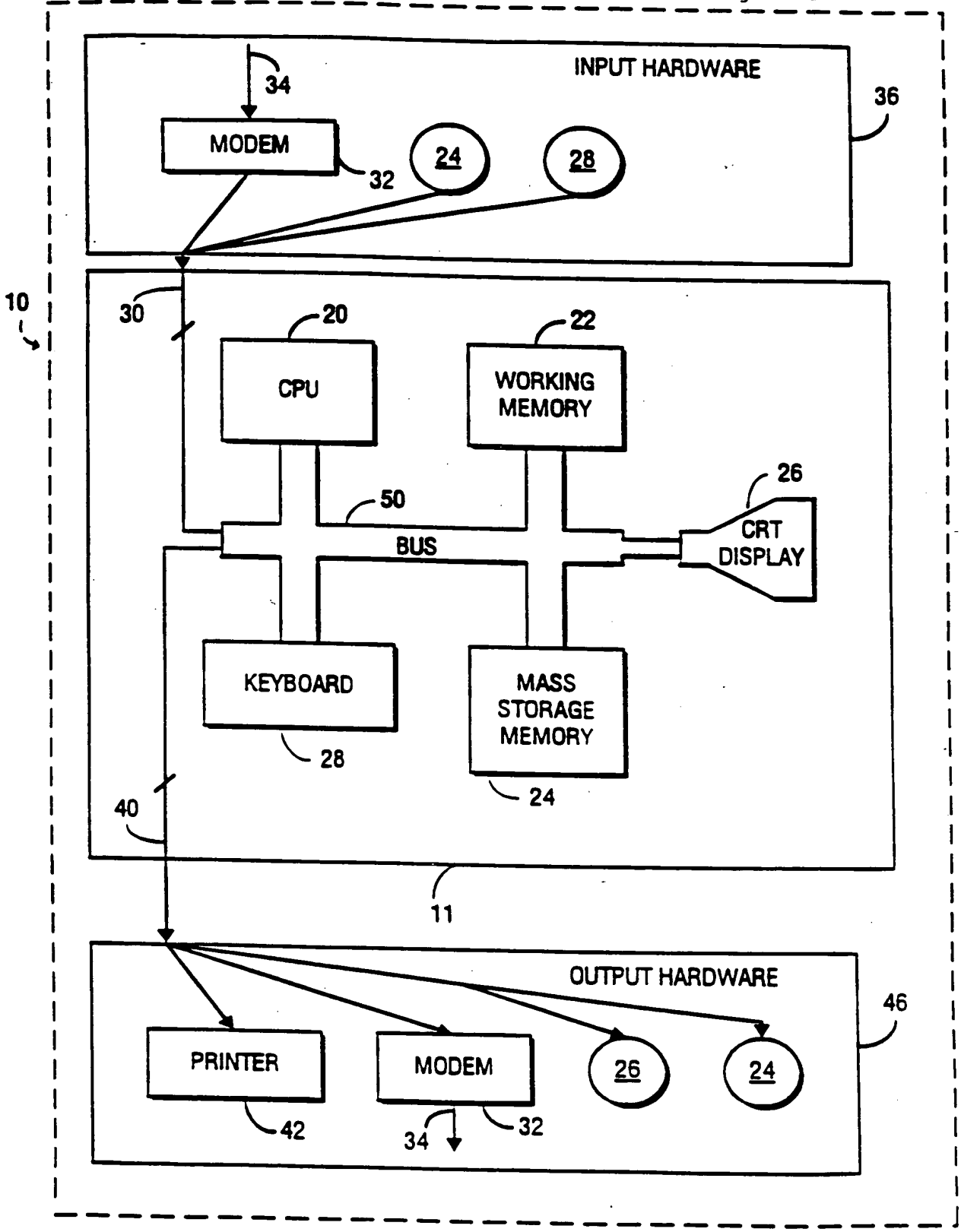
FIGURE 1 (cont.)

ATOM	3400	OH2	TIP3	70	30.776	23.190	13.426	1.00	35.94
ATOM	3401	OH2	TIP3	71	39.550	3.505	-0.797	1.00	44.89
ATOM	3402	OH2	TIP3	72	11.418	30.014	18.681	1.00	37.07
ATOM	3403	OH2	TIP3	73	12.592	28.999	20.880	1.00	37.53
ATOM	3404	OH2	TIP3	74	54.478	6.360	11.185	1.00	42.03
ATOM	3405	OH2	TIP3	75	12.086	2.791	12.915	1.00	29.59
ATOM	3406	OH2	TIP3	76	18.225	19.519	33.978	1.00	33.10
ATOM	3407	OH2	TIP3	77	11.677	36.171	12.007	1.00	56.16
ATOM	3408	OH2	TIP3	78	11.319	35.115	15.313	1.00	35.91
ATOM	3409	OH2	TIP3	79	49.775	4.145	-0.325	1.00	63.48
ATOM	3410	OH2	TIP3	80	46.373	21.363	6.807	1.00	26.12
ATOM	3411	OH2	TIP3	81	18.126	35.806	20.605	1.00	29.66
ATOM	3412	OH2	TIP3	82	28.293	3.447	0.583	1.00	21.79
ATOM	3413	OH2	TIP3	83	20.086	4.628	14.855	1.00	44.92
ATOM	3414	OH2	TIP3	85	19.694	33.413	0.806	1.00	34.26
ATOM	3415	OH2	TIP3	87	17.814	5.041	25.621	1.00	45.94
ATOM	3416	OH2	TIP3	88	9.151	35.189	12.200	1.00	50.30
ATOM	3417	OH2	TIP3	89	28.063	25.834	6.403	1.00	47.14
ATOM	3418	OH2	TIP3	90	23.930	54.835	27.010	1.00	36.48
ATOM	3419	OH2	TIP3	91	8.080	25.210	6.084	1.00	33.01
ATOM	3420	OH2	TIP3	92	25.675	26.853	5.755	1.00	39.86
ATOM	3421	OH2	TIP3	93	36.215	33.769	7.228	1.00	24.13
ATOM	3422	OH2	TIP3	94	44.576	4.479	5.203	1.00	49.35
ATOM	3423	OH2	TIP3	95	8.686	33.376	8.329	1.00	28.75
ATOM	3424	OH2	TIP3	96	16.567	43.764	11.647	1.00	37.52
ATOM	3425	OH2	TIP3	97	18.639	37.102	28.670	1.00	34.49
ATOM	3426	OH2	TIP3	98	11.850	38.492	15.839	1.00	58.36
ATOM	3427	OH2	TIP3	99	1.757	17.697	30.552	1.00	30.16
ATOM	3428	OH2	TIP3	100	38.062	41.239	27.946	1.00	17.16
ATOM	3429	OH2	TIP3	101	27.889	50.445	37.057	1.00	48.61
ATOM	3430	OH2	TIP3	102	47.875	2.606	1.215	1.00	45.89
ATOM	3431	OH2	TIP3	103	57.882	18.168	8.130	1.00	45.09
ATOM	3432	OH2	TIP3	104	21.556	43.776	35.255	1.00	33.42
ATOM	3433	OH2	TIP3	105	22.140	30.473	5.457	1.00	39.79
ATOM	3434	OH2	TIP3	106	32.336	8.468	23.760	1.00	73.89
ATOM	3435	OH2	TIP3	107	51.548	8.278	-1.912	1.00	28.27
ATOM	3436	OH2	TIP3	108	8.860	13.655	39.162	1.00	33.15
ATOM	3437	OH2	TIP3	109	6.700	4.449	19.242	1.00	51.28
ATOM	3438	OH2	TIP3	110	33.801	29.559	25.988	1.00	53.24
ATOM	3439	OH2	TIP3	111	42.999	2.893	-1.302	1.00	46.52
ATOM	3440	OH2	TIP3	112	31.945	15.930	15.358	1.00	47.42
ATOM	3441	OH2	TIP3	113	22.230	16.440	-7.612	1.00	56.68
ATOM	3442	OH2	TIP3	115	13.726	39.997	22.208	1.00	31.56
ATOM	3443	OH2	TIP3	116	23.251	37.041	24.987	1.00	53.40
ATOM	3444	OH2	TIP3	117	23.611	32.166	12.751	1.00	38.21
ATOM	3445	OH2	TIP3	118	30.487	26.338	-0.700	1.00	31.83
ATOM	3446	OH2	TIP3	119	19.447	2.060	15.121	1.00	39.28
ATOM	3447	OH2	TIP3	120	24.042	51.710	8.456	1.00	39.94
ATOM	3448	OH2	TIP3	121	47.391	-0.070	5.383	1.00	37.69
ATOM	3449	OH2	TIP3	122	59.581	21.821	1.048	1.00	54.95
ATOM	3450	OH2	TIP3	123	9.207	34.806	16.904	1.00	31.85
ATOM	3451	OH2	TIP3	124	3.401	4.534	13.008	1.00	53.38
ATOM	3452	OH2	TIP3	125	21.114	48.341	33.295	1.00	43.92
ATOM	3453	OH2	TIP3	126	20.174	32.741	20.466	1.00	66.24
ATOM	3454	OH2	TIP3	128	16.410	45.812	26.424	1.00	35.46
ATOM	3455	OH2	TIP3	129	32.863	61.435	29.648	1.00	66.85
ATOM	3456	OH2	TIP3	130	33.387	55.608	7.433	1.00	64.07
ATOM	3457	OH2	TIP3	131	28.167	51.328	29.584	1.00	27.99

FIGURE 1 (cont.)

```
ATOM   3458  OH2 TIP3  132      16.147  45.753   6.715  1.00 54.98
ATOM   3459  OH2 TIP3  133      20.658  52.304  24.938  1.00 25.99
ATOM   3460  OH2 TIP3  134      44.627   9.499 -13.307  1.00 44.79
ATOM   3461  OH2 TIP3  135      64.095   6.945  12.329  1.00 44.41
ATOM   3462  OH2 TIP3  136      18.514  41.737  27.310  1.00 19.89
ATOM   3463  OH2 TIP3  137      42.275  19.609  -2.298  1.00 15.25
ATOM   3464  OH2 TIP3  139      14.970  49.971  28.272  1.00 35.15
ATOM   3465  OH2 TIP3  140      15.165   8.029   3.479  1.00 38.41
ATOM   3466  OH2 TIP3  141      17.347   7.548  21.016  1.00 36.09
ATOM   3467  OH2 TIP3  142      21.921   4.401   1.631  1.00 39.46
ATOM   3468  OH2 TIP3  143      23.711  49.091  33.933  1.00 39.80
ATOM   3469  OH2 TIP3  144      21.398  56.732  11.465  1.00 30.74
ATOM   3470  OH2 TIP3  145      15.424  25.910  28.153  1.00 28.23
ATOM   3471  OH2 TIP3  146      30.399  11.030  -7.068  1.00 50.79
ATOM   3472  OH2 TIP3  147      12.734  29.004  16.438  1.00 22.08
ATOM   3473  OH2 TIP3  148      53.920   5.003  16.906  1.00 54.39
ATOM   3474  OH2 TIP3  149       7.523  36.343  15.403  1.00 44.62
ATOM   3475  OH2 TIP3  150      14.223  30.953  15.400  1.00 37.15
ATOM   3476  OH2 TIP3  151      28.644   2.628   3.023  1.00 31.14
ATOM   3477  OH2 TIP3  152      15.963   9.043  22.893  1.00 26.75
ATOM   3478  OH2 TIP3  153      17.823  10.746  23.731  1.00 20.71
ATOM   3479  OH2 TIP3  154      29.179  54.461  32.613  1.00 68.03
ATOM   3480  OH2 TIP3  155      35.993  37.805  29.152  1.00 20.17
ATOM   3481  OH2 TIP3  156      53.831  24.063   9.859  1.00 49.86
ATOM   3482  OH2 TIP3  157      20.267  46.970  30.983  1.00 34.93
ATOM   3483  OH2 TIP3  158      32.383  43.988   6.930  1.00 39.67
ATOM   3484  OH2 TIP3  159       2.201   6.263  18.618  1.00 35.49
ATOM   3485  OH2 TIP3  160      48.626  11.397  -2.343  1.00 32.41
ATOM   3486  OH2 TIP3  161      21.594   8.868  -2.657  1.00 47.49
ATOM   3487  OH2 TIP3  162      21.981  51.645   6.828  1.00 36.67
ATOM   3488  OH2 TIP3  163      41.875  36.089  18.851  1.00 38.83
ATOM   3489  OH2 TIP3  164      39.302  39.590  11.776  1.00 50.01
ATOM   3490  OH2 TIP3  165      40.112  35.572  14.944  1.00 47.69
ATOM   3491  OH2 TIP3  166      39.529  30.929  22.535  1.00 41.91
```

Figure 2


INPUT HARDWARE
34
36
MODEM
32
24
28
10
30
20
22
CPU
WORKING MEMORY
26
50
BUS
CRT DISPLAY
KEYBOARD
MASS STORAGE MEMORY
28
24
40
11
OUTPUT HARDWARE
46
PRINTER
MODEM
26
24
42
34
32

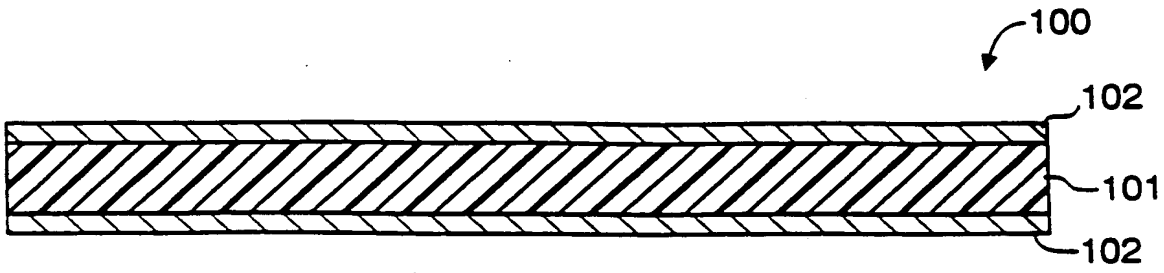


Figure 3

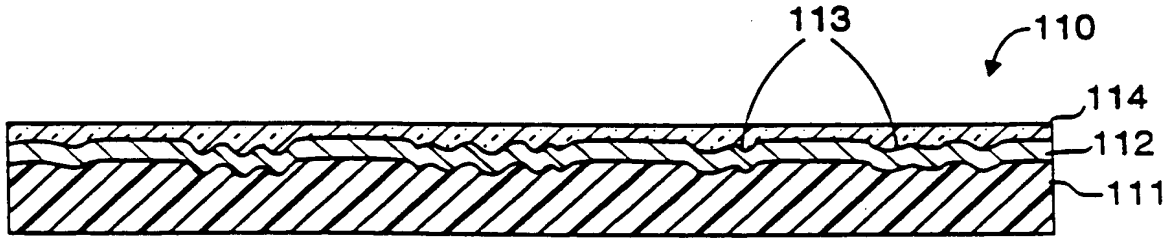


Figure 4

SUBSTITUTE SHEET

FIGURE 5

FIGURE 6

FIGURE 7

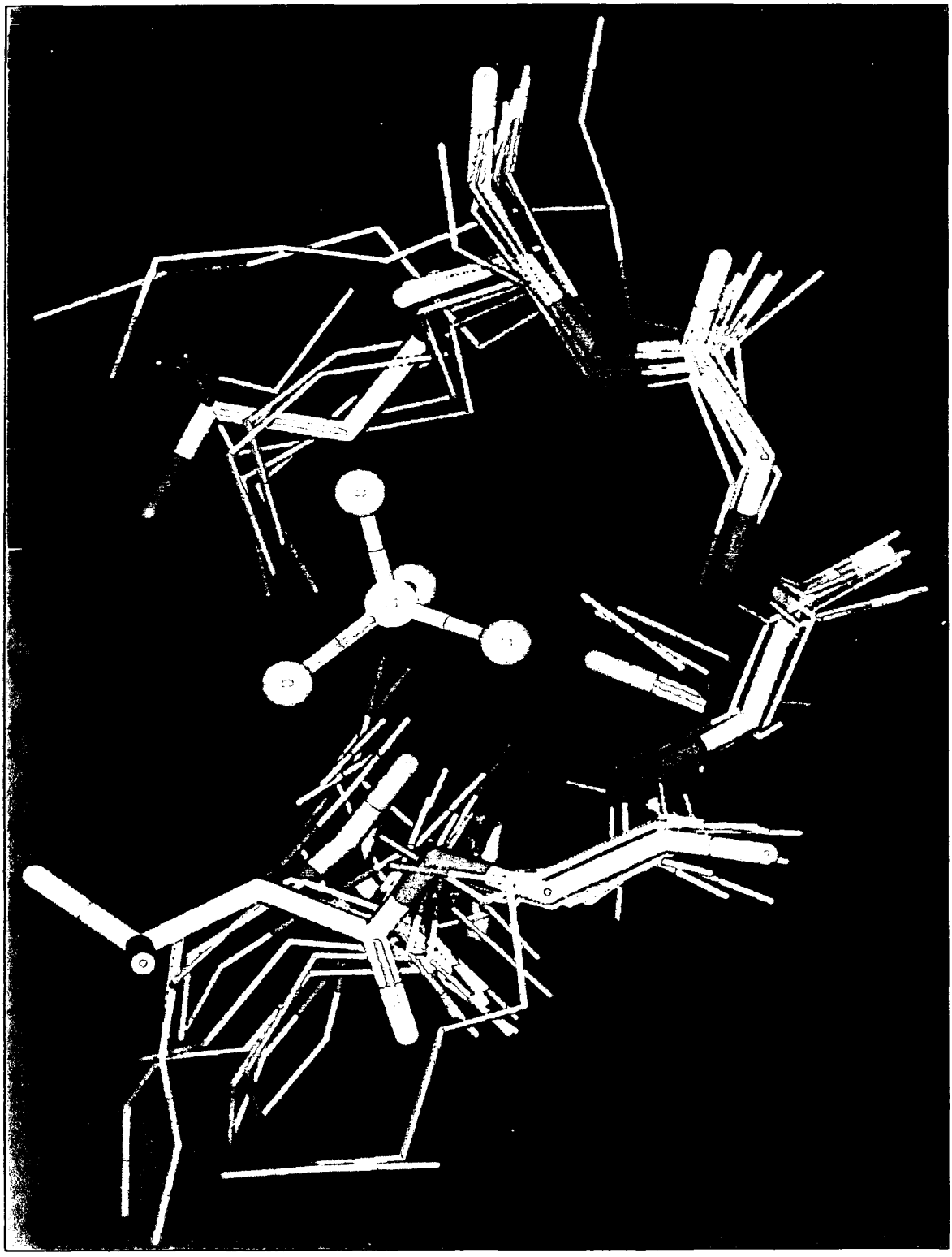


FIGURE 8

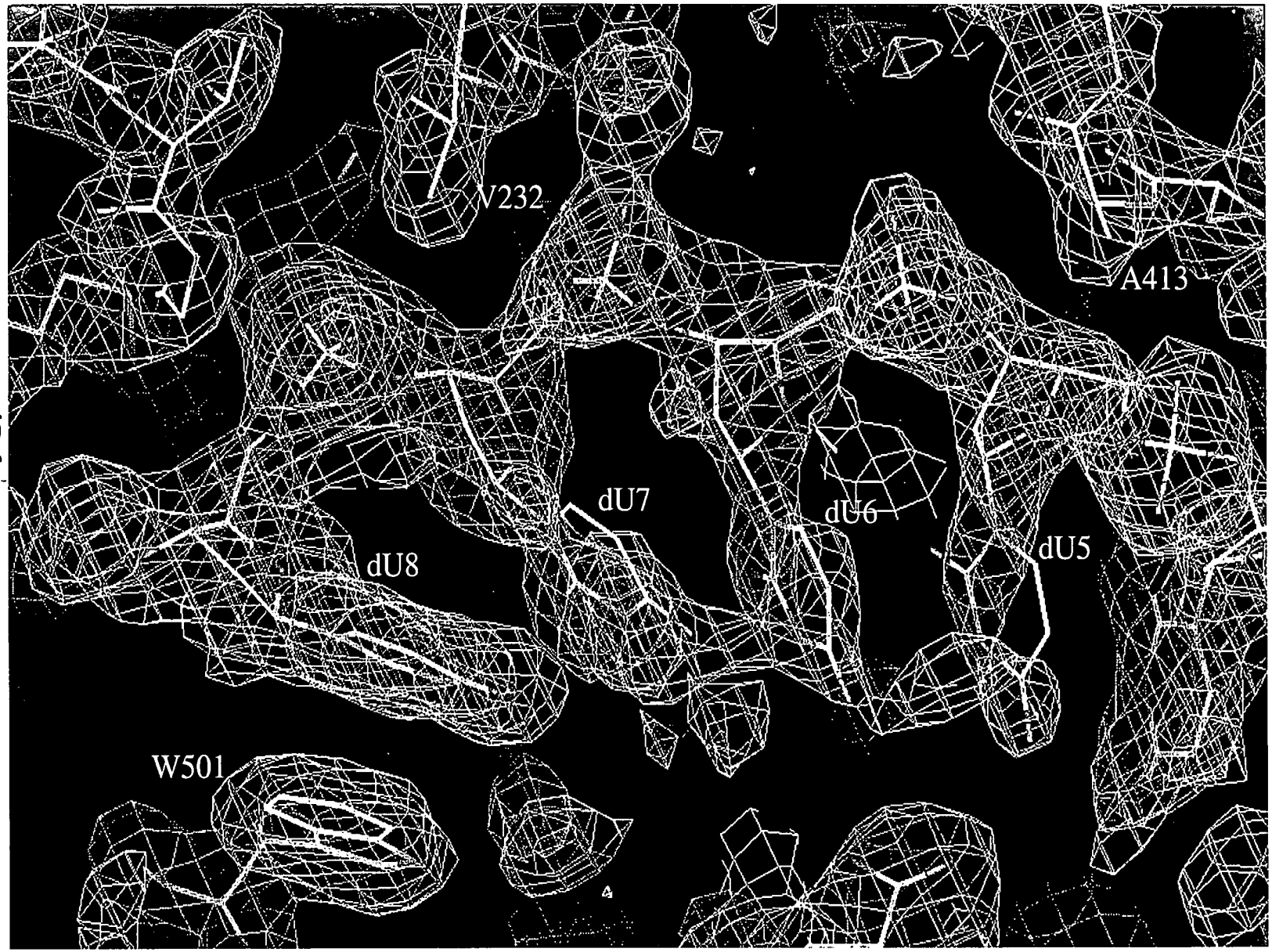
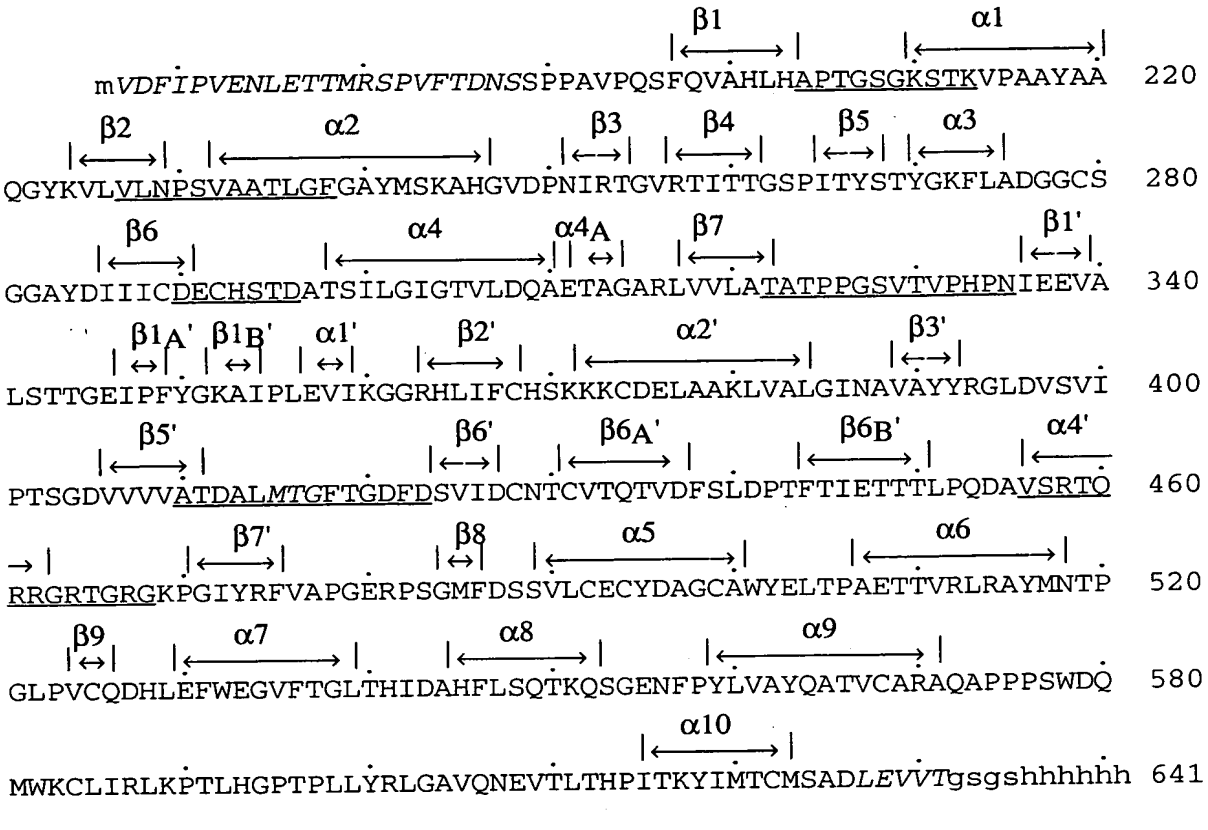


FIGURE 8


β1 α1
mVDFIPVENLETTMRSPVFTDNSSPPAVPQSFQVAHLHAPTGSGKSTKVPAAYAA 220
β2 α2 β3 β4 β5 α3
QGYKVLVLNPSVAATLGFGAYMSKAHGVDPNIRTGVRTITTGSPITYSTYGKFLADGGCS 280
β6 α4 α4A β7 β1'
GGAYDIIICDECHSTDATSILGIGTVLDQAETAGARLVVLATATPPGSVTVPHPNIEEVA 340
β1A' β1B' α1' β2' α2' β3'
LSTTGEIPFYGKAIPLEVIKGGRHLIFCHSKKKCDELAAKLVALGINAVAYYRGLDVSVI 400
β5' β6' β6A' β6B' α4'
PTSGDVVVVATDALMTGFTGDFDSVIDCNTCVTQTVDFSLDPTFTIETTTLPQDAVSRTQ 460
β7' β8 α5 α6
RRGRTGRGKPGIYRFVAPGERPSGMFDSSVLCECYDAGCAWYELTPAETTVRLRAYMNTP 520
β9 α7 α8 α9
GLPVCQDHLEFWEGVFTGLTHIDAHFLSQTKQSGENFPYLVAYQATVCARAQAPPPSWDQ 580
α10
MWKCLIRLKPTLHGPTPLLYRLGAVQNEVTLTHPITKYIMTCMSADLEVVTgsgshhhhhh 641

		I		Ia		II		III
NS3	204	APTGSGKSTK	(13)	VLNPSVAATLGF	(40)	DECHSTD	(25)	TATPPGSVTVPHPN
NPH-II	185	GGTGVGKTSQ	(28)	VILSLPRIALVR	(60)	DEVHEHD	(23)	TATLEDDRERLKVF
EIF-4A	63	AQSGTGKTGT	(19)	MLAPTRELALQI	(63)	DEADEML	(24)	SATMPNDVLEVTTK
PcrA	31	AGAGSGKTRV	(20)	AITFTNKAAREM	(150)	DEYQDTN	(19)	VGDADQSIYRWRGA
UvrD	30	AGAGSGKTRV	(20)	AVTFTNKAAREM	(150)	DEFQDTN	(19)	VGDDDQSIYGWRGA
Rep	22	AGAGSGKTRV	(20)	AVTFTNKAAAEM	(150)	DEYQDTN	(19)	VGDDDQSIYSWRGA

		IV?		V		VI
NS3	365	LIFCHSKKK	(36)	ATDALMTGFTGDFE	(32)	VSRTQRRGRTGRG
NPH-II	397	IVFVASVAQ	(43)	STPYLESSVTIRNV	(24)	SMRDQRKGRVGRV
EIF-4A	263	VIFCNTRRK	(43)	STDLLARGIDVQQV	(12)	EERRLAYVGITRA
PcrA	280	ILLEQNYRS	(273)	MTLHAAKGLEFPVV	(23)	EERRLAYVGITRA
UvrD	278	IRLEQNYRS	(271)	MTLHSAKGLEFPQV	(23)	EERRLAYVGVTRA
Rep	272	IKLEQNYRS	(275)	MTLHASKGLEFPYV	(22)	EERRLAYVGITRA

FIGURE 9A

FIGURE 9B

FIGURE 10

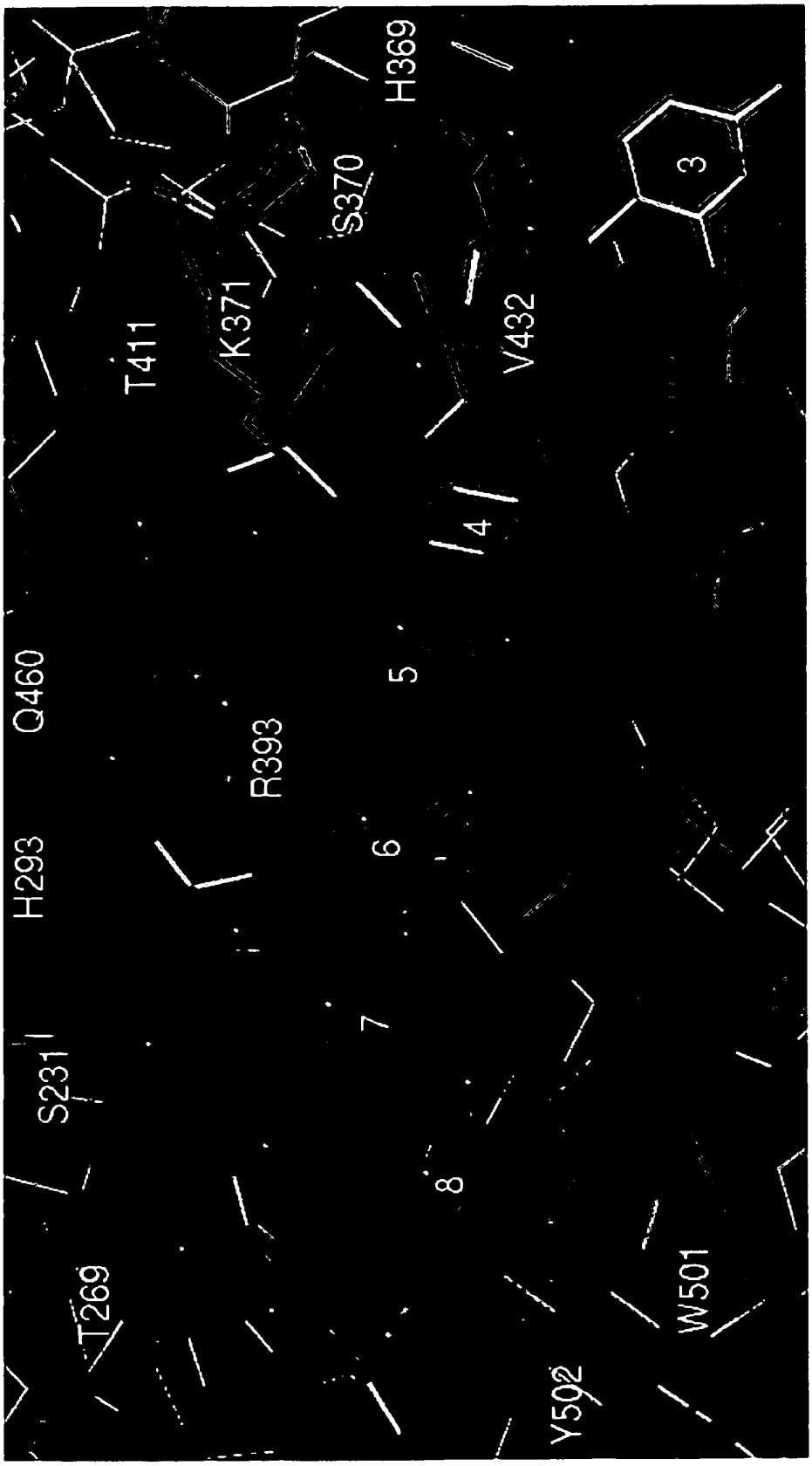

T269
S231
H293
Q460
R393
T411
K371
S370
H369
V432
W501
Y502
3
4
5
6
7
8

FIGURE 11A

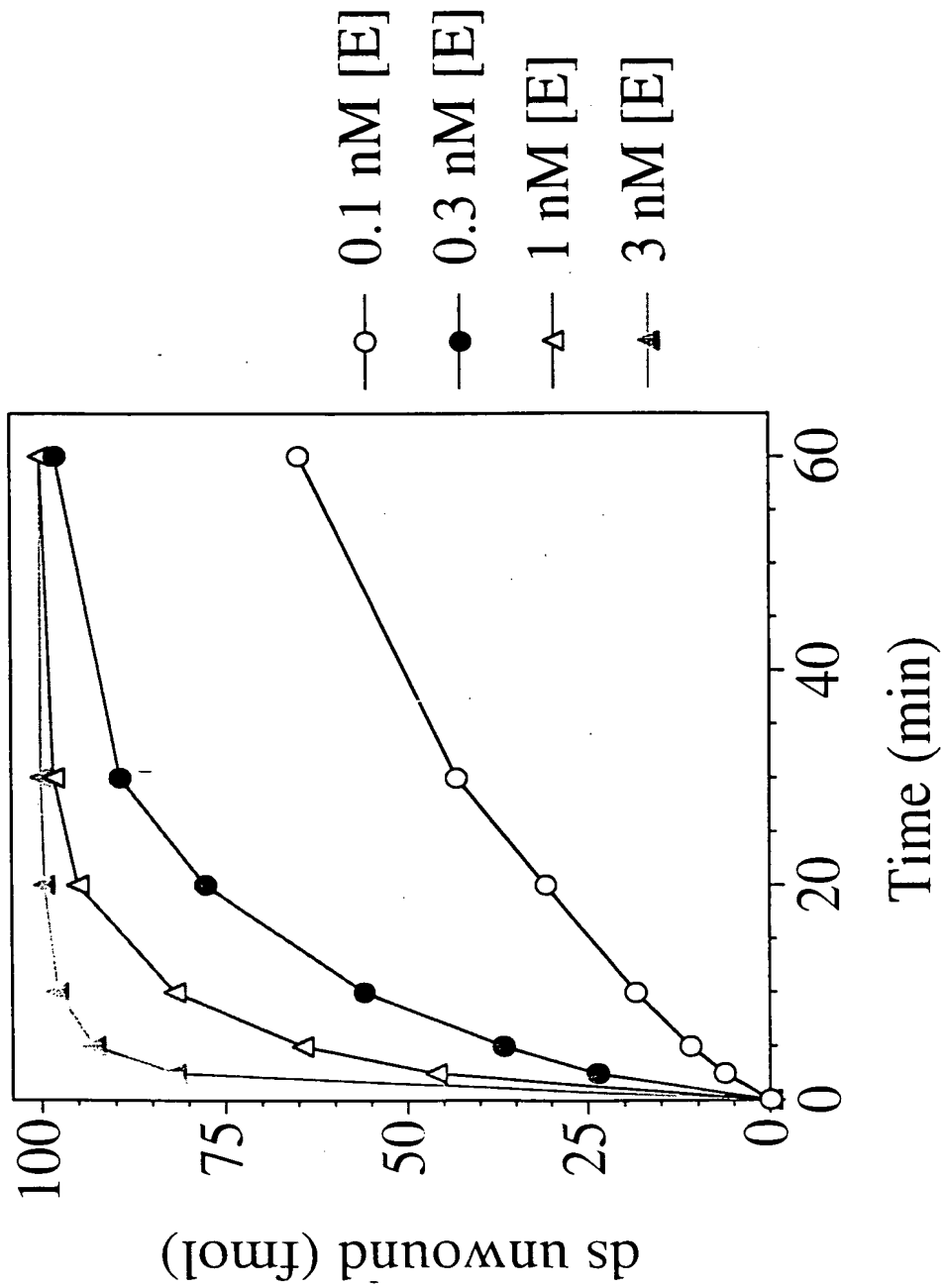

0.1 nM [E]
0.3 nM [E]
1 nM [E]
3 nM [E]
ds unwound (fmol)
100
75
50
25
0
0
20
40
60
Time (min)

FIGURE 11B

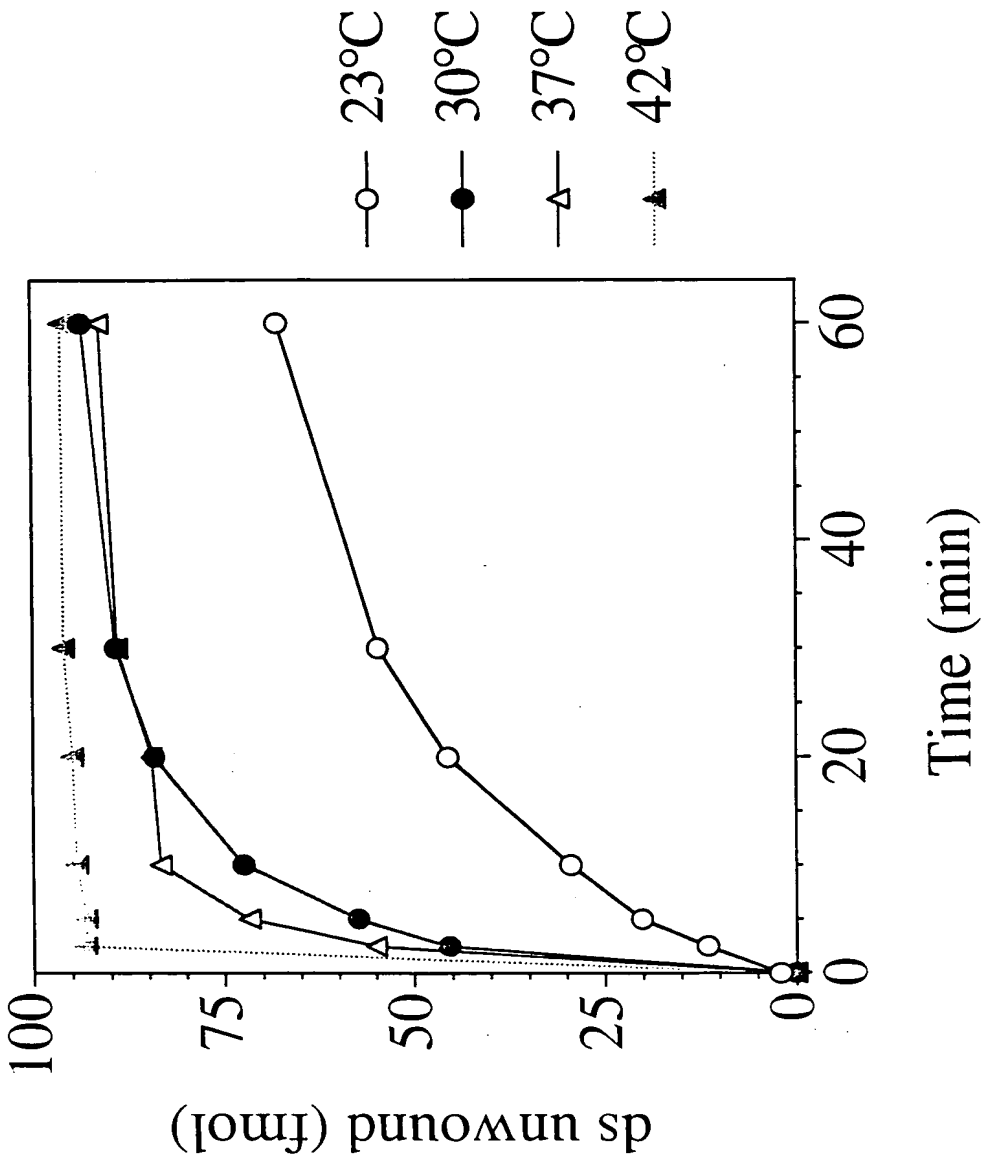


FIGURE 11C

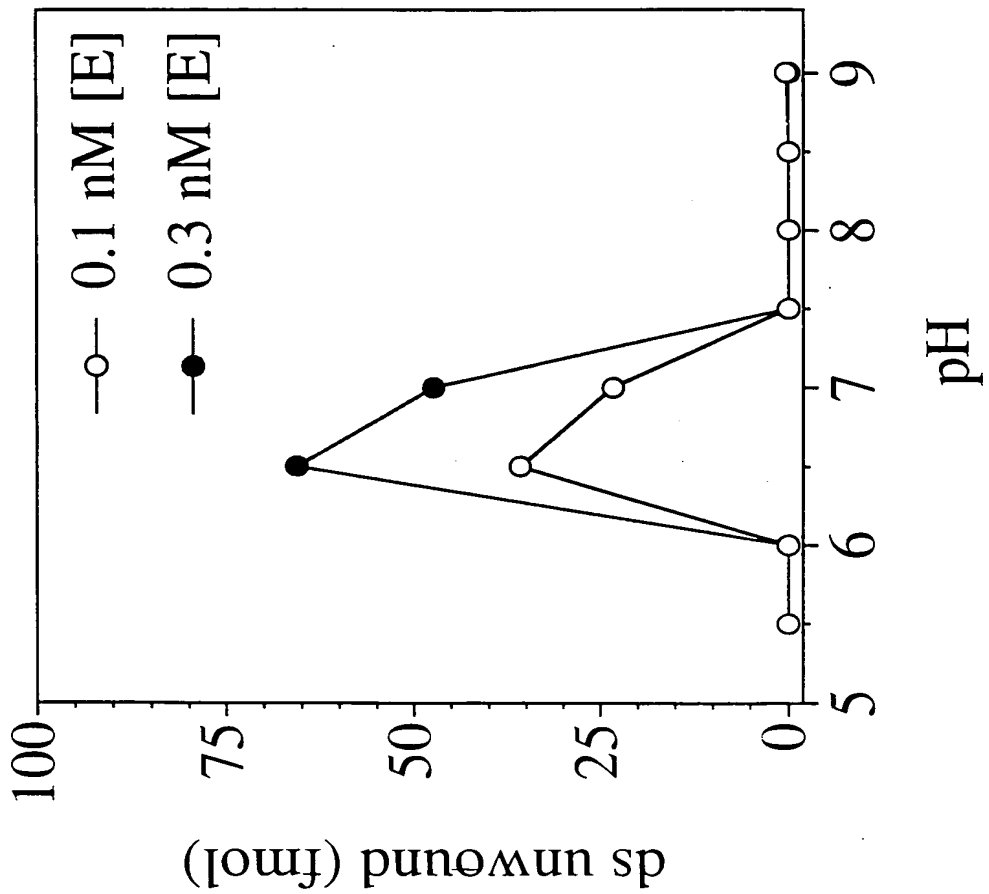


FIGURE 11D

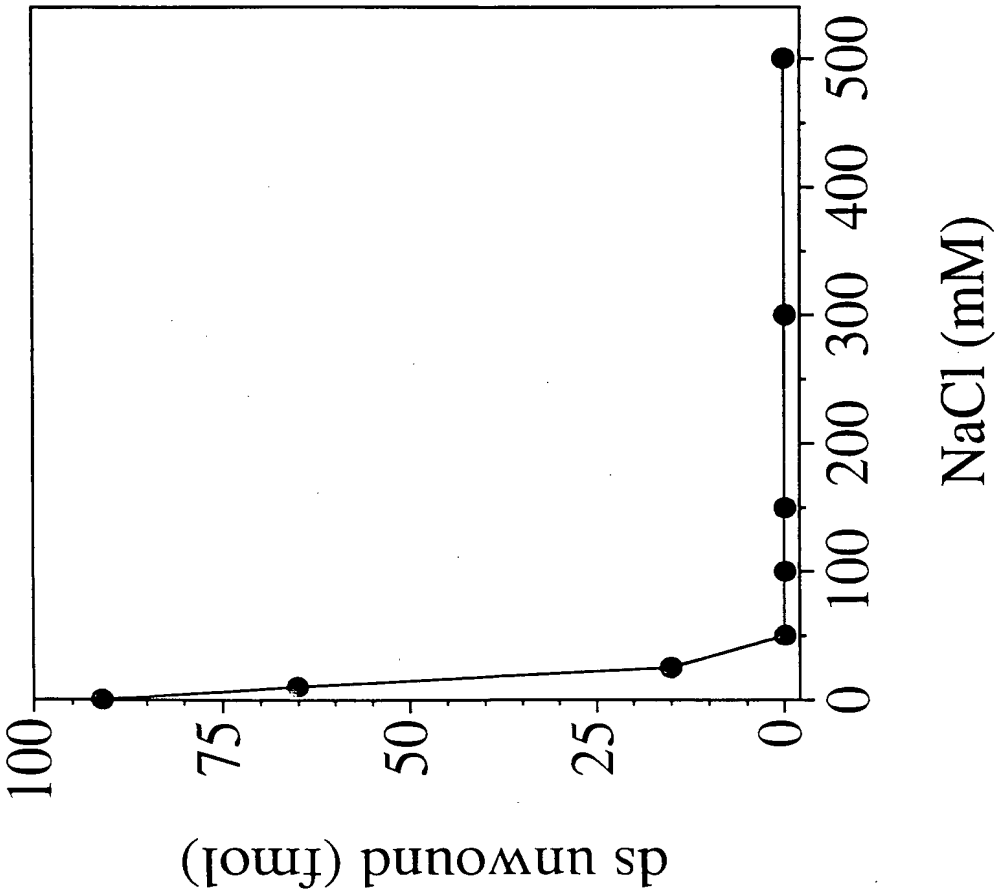


FIGURE 11E

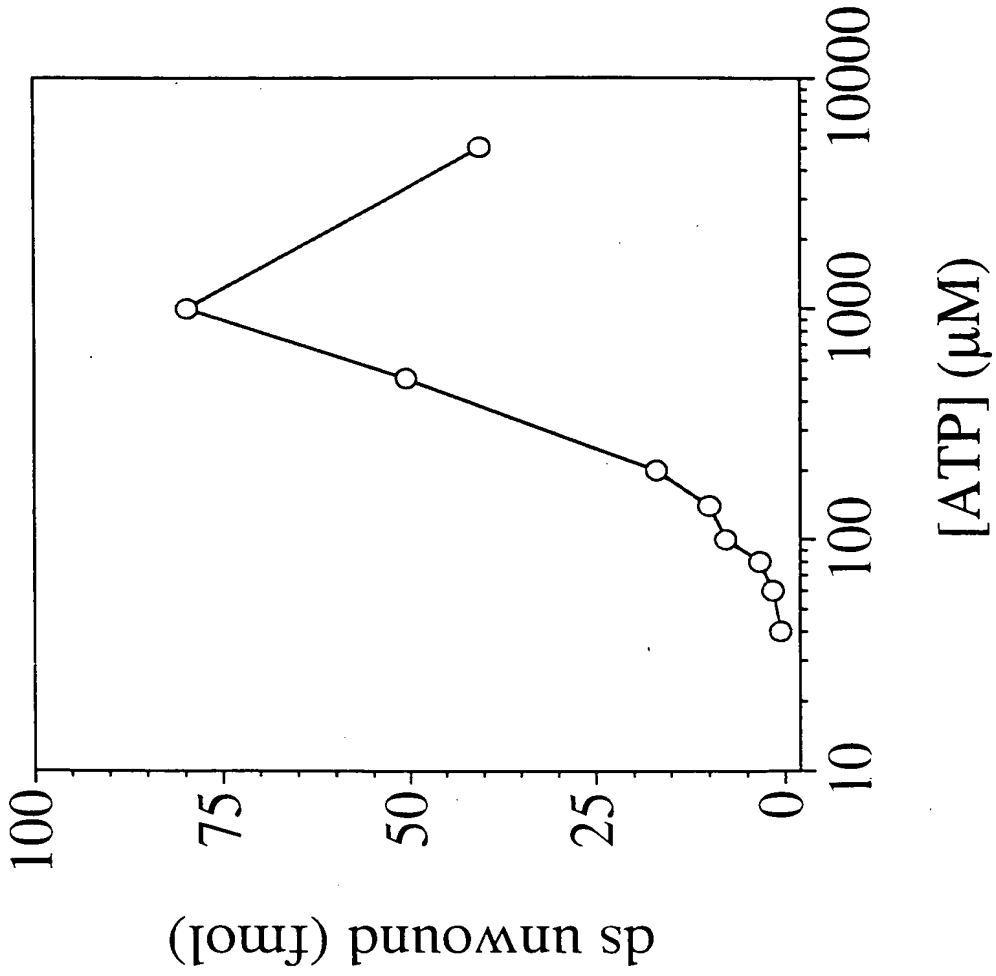
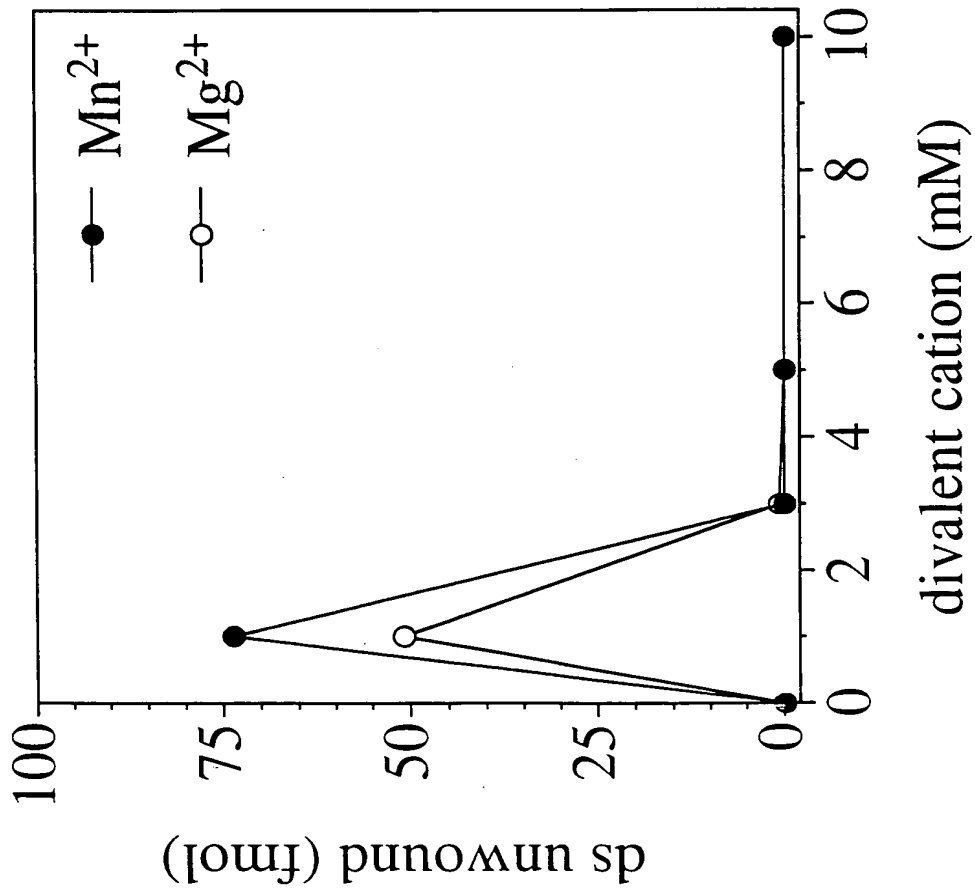


FIGURE 11F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75
50
25
0
0
2
4
6
8
10
divalent cation (mM)
Mn2+
Mg2+

FIGURE 12A

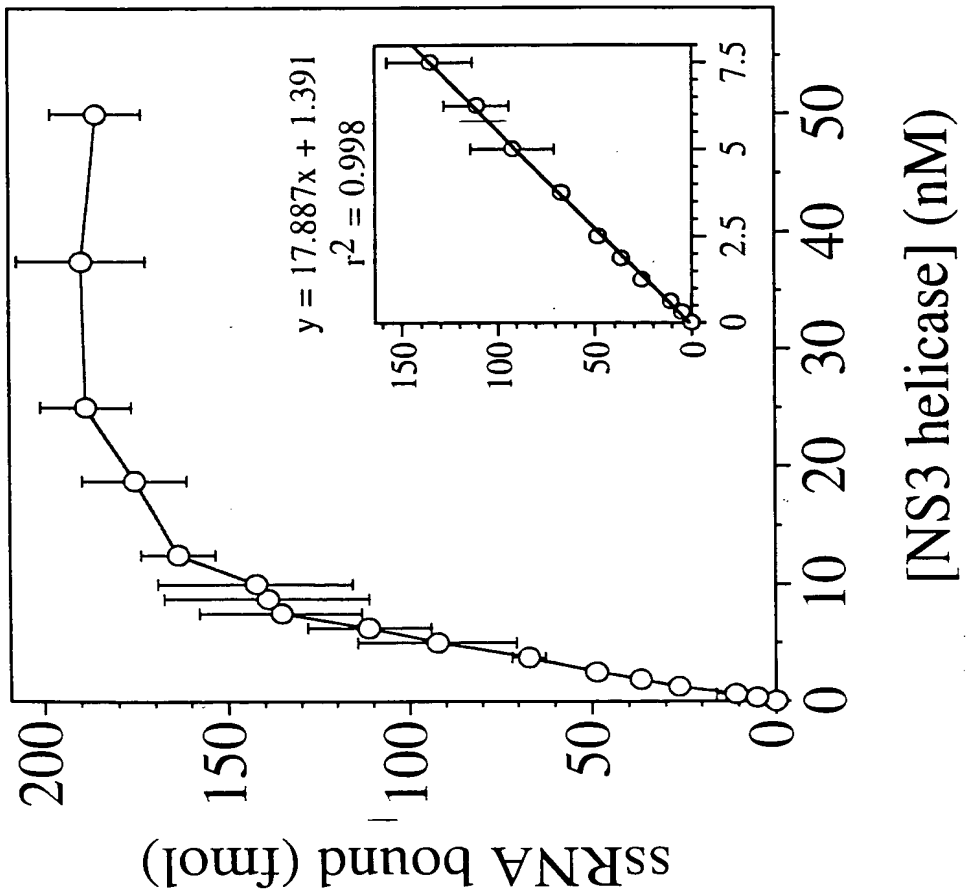

ssRNA bound (fmol)
0
50
100
150
200
0
10
20
30
40
50
[NS3 helicase] (nM)
y = 17.887x + 1.391
r2 = 0.998
0
50
100
150
0
2.5
5
7.5

FIGURE 12B

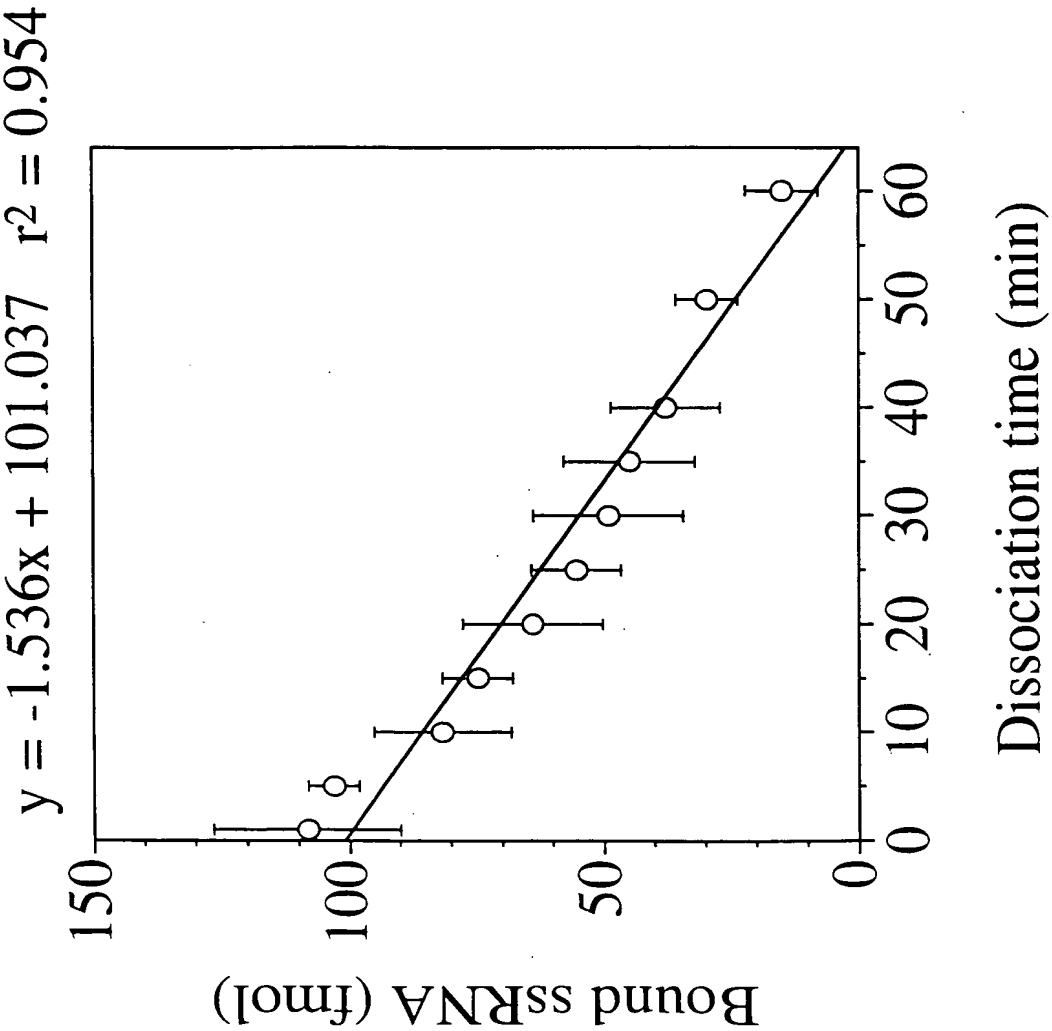

y = -1.536x + 101.037 r2 = 0.954
Bound ssRNA (fmol)
150
100
50
0
0
10
20
30
40
50
60
Dissociation time (min)

FIGURE 12C

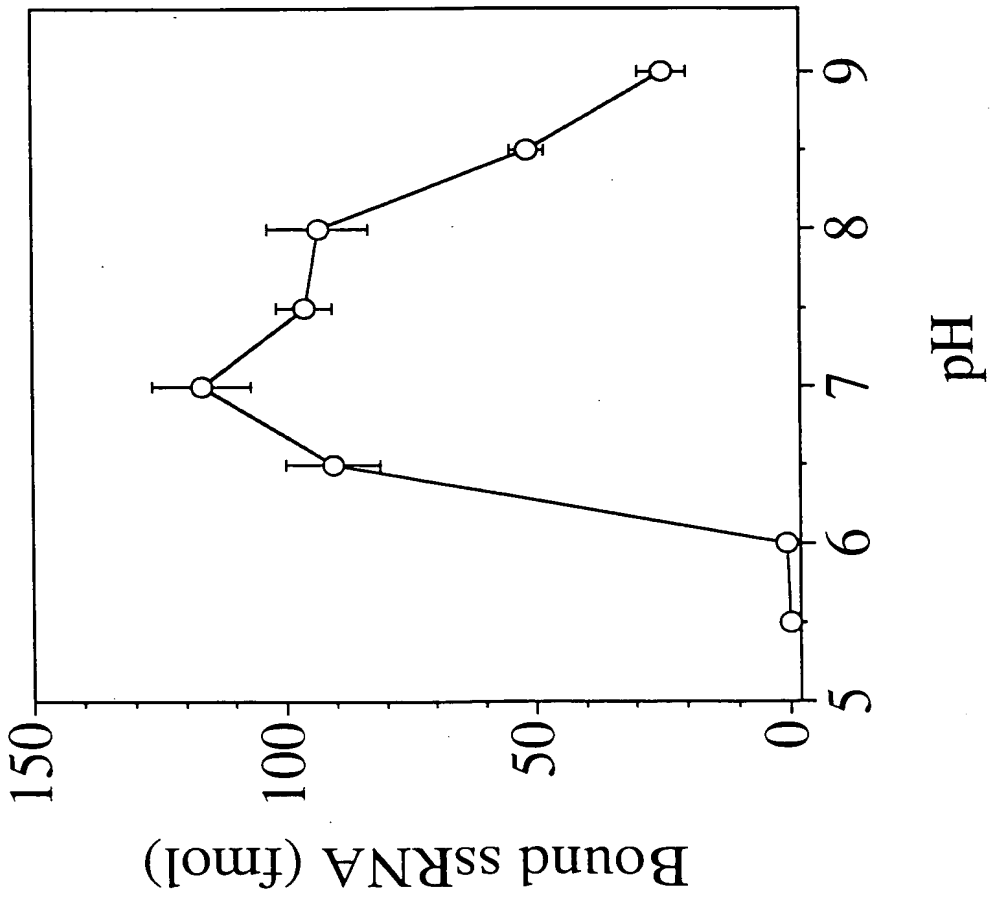


FIGURE 12D

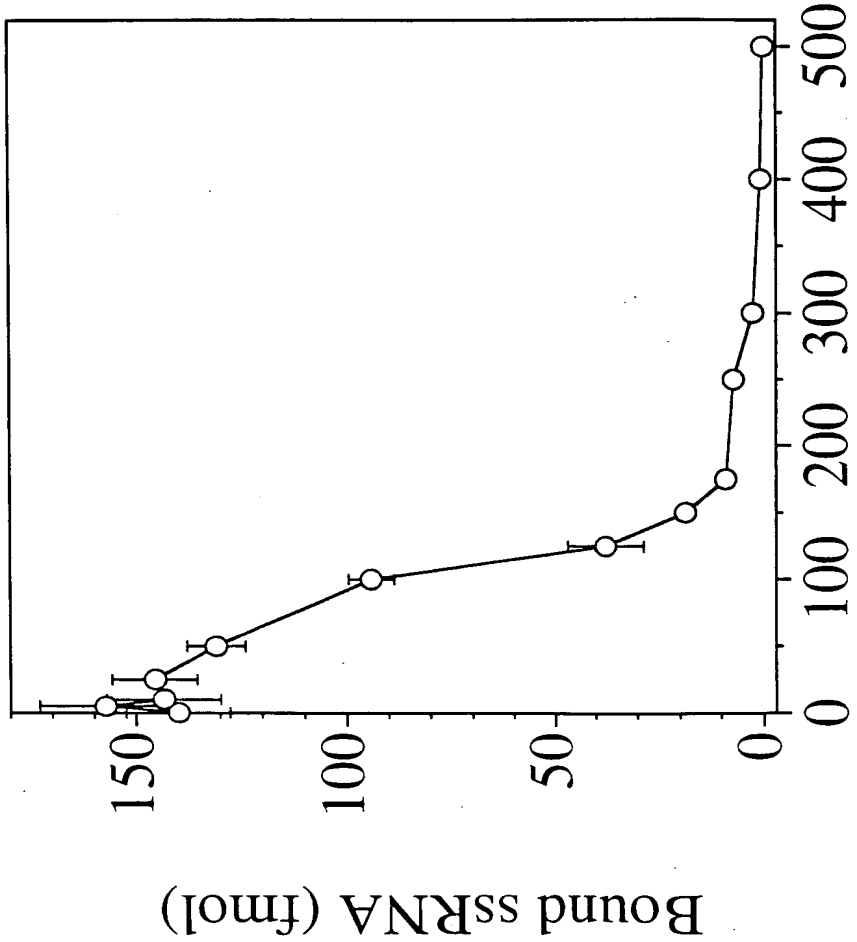


FIGURE 12E

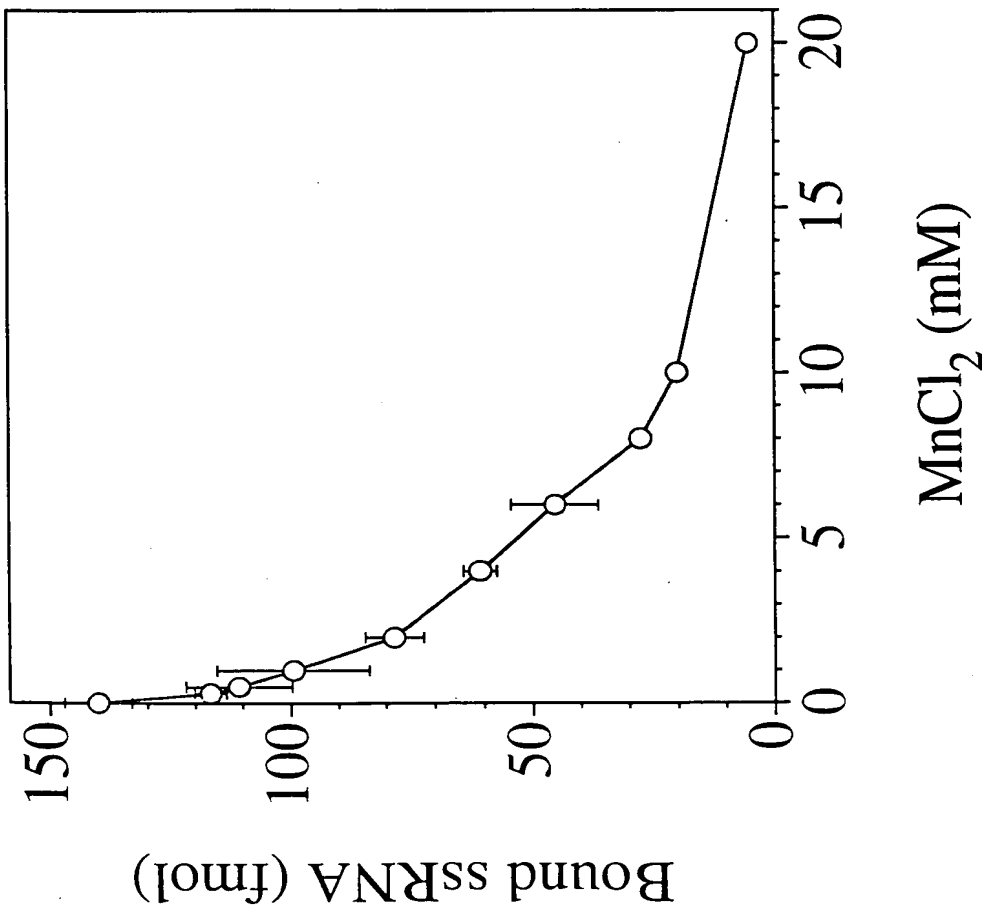


FIGURE 13A

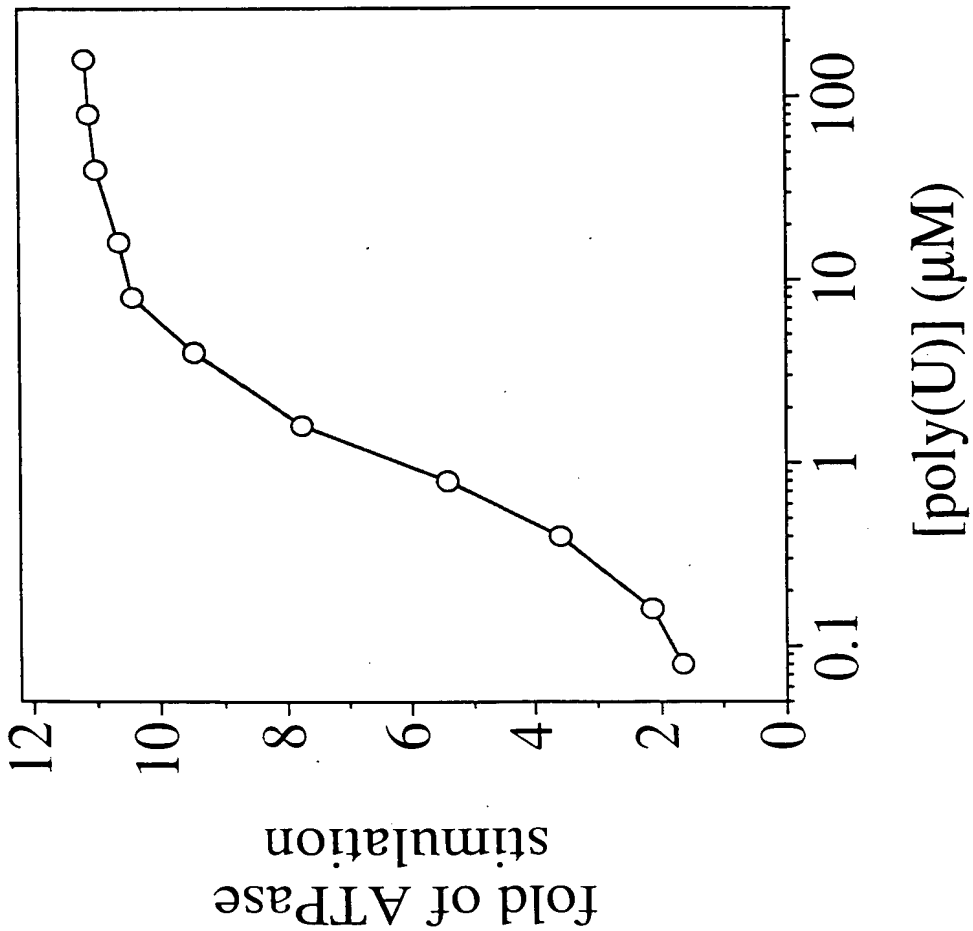
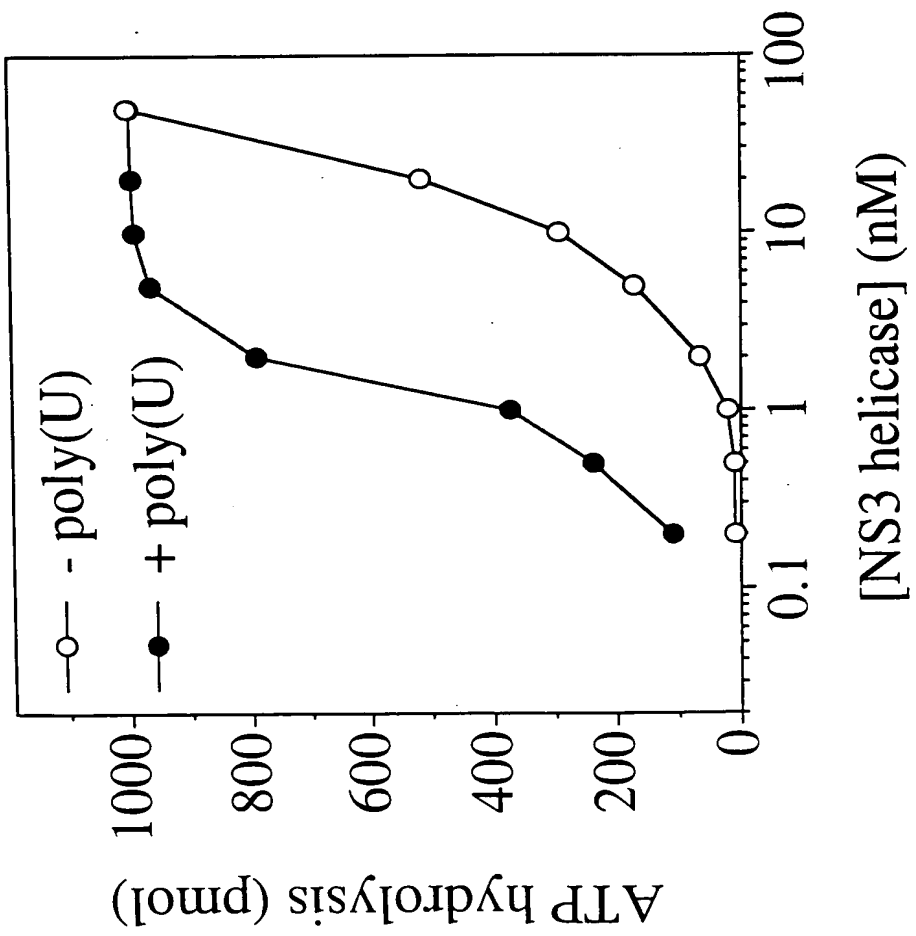


FIGURE 13B


ATP hydrolysis (pmol)
0
200
400
600
800
1000
0.1
1
10
100
[NS3 helicase] (nM)
- poly(U)
+ poly(U)